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Original Communications.

ON ASYLUM MANAGEMENT.*

BY JOSEPH WORKMAN, M.D., TORONTO.

With your kind permission I would now avail myself of this final opportunity of speaking a few words on some matters of much interest to yourselves, to the afflicted ones consigned to your care, and to society at large I must, however, frankly forewarn you that my observations may, to some of you, savour more of the leaven of censorious comment than of gratifying approbation; yet, remembering the indulgence awarded to me by the the association in past years, with whatever freedom I may have expressed myself on every subject under discussion, and feeling perfectly confident that the highest recommendation to your polite attention is your reliance on the sincerity of the speaker, I dismiss from my mind every apprehension of severe criticism, and addressing you as reflecting and liberal men, who thoroughly comprehend the truthfulness of the proverb, "Faithful are the wounds of a friend, but deceitful are the kisses of an enemy," I shall endeavour to tell you, with becoming frankness, what I think of some of the harmful exuberances, and a few of the defects, of your general asylum administration; and I wish it to be kept in mind that I desire not to be understood as restricting my disapproval of existing errors or faults to institutions south of the great boundary line, but as falling on those of my own land, wherever they may chance to present.

I start with the general proposition that much government is, in all departments of life, a fundamental evil, and too much government is, in all human affairs and relations, a blunder that invariably and inevitably defeats the true purpose of all government; and when government is not only redundant in quantity, but also hurtful in quality, I can conceive no shorter or surer road to anarchy and corporate ruin. It is my belief that no small proportion of American asylums are too much governed, and that some of them have been sadly misgoverned. I am not blind to the fact that in any country which has achieved free popular institutions, and in which all public affairs must be conducted in conformity to the dominant suffrage of the electoral body, there must be great difficulty in convincing the multitude that there are some affairs in which they may be lacking in that cautious discrimination and stability of purpose which are essential to final success; and I freely admit that the conservation of the grand central blessing of national liberty must have paramount consideration. It rarely, however, happens that consciousness of the possession of power does not prompt to its exercise, and too often power is exercised merely for the sake of demonstrating its possession. In all such instances there will be much government, and very certainly not a little misgovernment. Some of you may have heard of the precocious little girl of eight years, who one morning said to her mother, "Mamma, may I be married?" The surprised dame answered, "What makes you ask that foolish question?" To which the bantam woman rejoined, "O, because I wish to let the children see a wedding." And just so it is with many bantam men, "dressed in a little brief authority," that do strut and cackle most vociferously. If they do not make the "angels weep," they certainly draw huge groans from many a poor devil under their authority. One of the greatest evils connected with the administration of your asylums is that of the uncertainty of the tenure of office of superintendents. It is impossible to glance over the lists of a series of years without being struck with the appearance of the many new names, and the disappearance of old ones, presented. It is, however, very gratifying to me to find the names of so many old friends still lingering in the Eastern and Middle States. I rejoice to see that New England and her old neighbours appear to cherish so much of the conservatism of the Mother land. I feel well assured that the asylums of Maine, New Hampshire, Massachusetts, New Jersey, Pennsylvania, and New York, by their so long retaining their well-tried men, have consulted the best in-

*Abstract from a paper read before the Association of Medical Superintendents of American Asylums for the Insane, in Toronto, on 14th June, 1881.

terests of the insane, and of their entire communities; and I may safely include in this category some others—as those of Boston, Rhode Island, and Hartford, whose superintendents retired after long periods of service, carrying with them the strong regrets of their governors and of the public at large. I accept it as an indisputable fact that the incumbents who have thus so long held their positions have well merited the permanence of their tenure of office; but if this be so, why should not the rule be universal? Surely the Eastern and Middle States enjoy not any monoply of good men. That the rule is not universal some who now hear me, and far too many of those who once heard me, could but too amply and painfully testify. At the close of the last meeting of this association, attended by me, at Madison, I had the painful intimation of the dismissal from office of a very energetic and, as far as I knew or have since learned, a very efficient superintendent, in his absence at that meeting. Such a procedure was surely more worthy of the autocrat of all the Russias than of the governing body of an American State Asylum; and yet, I fear, it was no isolated instance of the capricious and cowardly official murder of a deserving public servant.

In Canada, fortunately for public officers, and, as I believe, for the public service, every Government appointment, and the majority of important corporate appointments, are understood and expected to be as durable as the good behaviour of the incumbents, which virtually is equivalent to life-long. I have even heard it said that it requires very strong pressure to effect the dismissal of an inefficient officer. It is also a well understood maxim in our departments that it is the moral duty of the chiefs to defend all their servants, and to see that they shall not suffer from unjust accusations. This system works well, and our men generally work well under it. The man who enters the public service under the expectation of this tenure has the very strongest inducement to acquit himself of all his duties zealously, fearlessly, and honourably; but he who knows not the day he may be turned adrift, and cast, perhaps, poor and broken-hearted on the world, has only meagre encouragement to be either active or honest. Nor can I think that the mitigation of this evil, under the system obtaining in some States, of periodic renewals of lease of office, by repetition of election every five or other number of years, is any very substantial improvement, for it is with you an unfortunate contingency that not only is it expected that every man shall exercise his electoral suffrage, but whoever fails to do so is regarded as a Philistine, and he must suffer decapitation accordingly. If, however, it be true, as I have heard often reported by your own people, that asylum superintendents, in common with other public officers, owe their appointments most largely to political influence and party energy, we need not be surprised when we see them floated out of office on the same wave on which they swam into it.

It would be presumptuous in me to commend for your adoption anything having no higher prestige than mere British or Canadian usage or merit; yet I do believe you would be large gainers by a quiet retracement of your steps in the matter of important appointments to office, the good and satisfactory working of which depends in so large a measure on matured experience; nor would I have you stop here, but I would go yet further and recommend the expediency, as well as the justice, of awarding to superintendents and other faithful officers a competent retiring annual allowance, graduated on their length of service. This is the rule in British and other transatlantic asylums. It has become the rule, though in a more limited degree, in this province, so that every officer or employè is granted a retiring allowance, in a lump sum, which is determined by the length of his or her service. The obvious object and tendency of this system is to induce every one engaged in the service, from the chief down to the scullion, to continue long, and behave well in their respective spheres. I regard it as equally just and politic. I must not forget here to add, that although public servants in Canada are not prohibited from exercising their electoral franchise, yet it is recommended to them by their superiors to abstain from so doing, and I have always regarded this exemption from party exposure as a valuable civil boon. I would close my observations on this part of my subject with the following quotations from a recent number of an able popular American journal, and allow me to say that I would not myself presume to speak of the Civil Service of the United States in similar severe terms:—

"There is no doubt whatever," says this writer,

"that the work of the country has been, and still is, incompetently done, and no doubt whatever the 'spoils doctrine,' as it is called in party politics, is the source of incalculable corruption and incalculable degradation."

Again, this writer says of the unhappy exigencies of a public officer, "He is always to feel that he cannot keep his place by any excellence of work, or any superlative fitness for it, but only by intriguing and showing himself ready to do the dirty work of the party on whose good will he depends."

The severity of these strictures forbids comment by an outsider.

The next evil to which I would allude, as calling for serious consideration, is that of the interference of governors or trustees of asylums with the appointments of assistants of any class or grade; and the same remark applies, with even greater force, to all higher authorities. I assume it as a certainty that every superintendent is capable of best judging of the fitness and competency of all his assistants, and it consorts with common sense that he will endeavour to procure, and to retain, the best he can find; and if not, he is unfit for his position, and the sooner he is released from it the better. It is, however, a fact which calls for no illustration that any employe, of whatever grade, who owes his position to the influence of any person above the superintendent or independent of him, can never prove to be a reliable or obedient officer or servant; for he believes, and too often knows, that his continuance in the service depends more upon the influence that first secured it than on his own good behaviour. There no doubt are worthy exceptions to this rule, but they are not so numerous as to disprove it. During my own rather long tenure of office, I had the high satisfaction of total non-interfereuce on the part of my superiors in this relation, and I would fondly hope my successor has had the like experience. I could not desire for him a greater curse than its opposite.

An evil of unspeakable virulence in connection with the administration of American asylums, but for which it is just to say the governors are not accountable, is the frequency with which groundless charges of misconduct or mismanagement are brought against the medical staff and their assistants. I need not particularize instances of this grievance, for you are all better acquainted with them than I can be. So far as I can remember nearly all these accusations have been the concoctions of discharged bad servants, or of imperfectly recovered patients, whose lingering insanity has underlain their moral obliquity. It is, however, truly lamentable to observe the extent of popular credence awarded to these calumniators, and it is badly calculated to elevate our conception of the primal purity of human nature to find that so many people are anxious to believe evil of their fellowmen, and to rejoice more in the hope of verifying iniquity than of discovering innocence. It is true that in every instance that has come to my knowledge the accused have come out triumphantly vindicated; yet who but themselves could tell—if indeed human language could depict—the mental agony, the wear and tear of brain and nerve, the writhings of conscious innocence, "the spurns that patient merit of the unworthy takes"—all too often endured under an augmenting bodily debilitation which invites the shaft of death, or renders imperative the relinquishment of office? Of how many this has been the fate their bereaved and sorrowing families best could tell! Is there no remedy for this evil? Must its recurrence become a perpetuity in your country? To tell me that it will recede before the march of a higher popular culture and intelligence would be but to ignore the fact that yours is the best—or at least the most largely—educated nation in Christendom, and to ignore the yet more pertinent fact that the pernicious accusations here complained of rarely, if ever, have their origin among the uneducated portion of the population. They are trumped up by persons possessing more intelligence than moral honesty, and they are cherished into pestilent vigour by those who have had but too much education.

It occurs to me that your institutions for the insane stand in need of some protecting breakwater that might withstand the force, or avert the fury, of the wave of popular delusion. That your local boards of trustees have not, in many instances, proved adequate to this service will be readily admitted by all who have suffered from the defect. It is my belief that a central governmental supervision by one or more well qualified, discreet officers, whose function should be that of vigilant and thorough—not merely perfunctory—inspection of the condition and treatment of the patients, and

of everything relating to their well-being, and whose duty it would be to report at stated periods to the Governor of the State whatever they might deem proper or useful to be made known, might meet your requirement. It would not be advisable that such officers should exercise any immediate control or direction over the financial affairs of the institutions, or have anything to do with the giving out of contracts, or the buying and selling operations, so long at least as your local boards of trustees, deserving of public confidence, continue to be appointed; for I would not merely that such inspecting officers be unsuspected of favouritism, but I would place them above all reach of suspicion. As a matter of course, and a means of protection to your boards against unjust accusations or insinuations, all their transactions should be submitted to the inspectors, whose duty it would be to report faithfully any observed impropriety. Speaking from my own experience, I do not hesitate to say that I always regarded this sort of governmental supervision as my best protection against misrepresentation or revengeful slander, and I must add that the only instance in which I suffered from these occurred before the establishment of our governmental inspectorship, when a local board failed in their duty of prompt and thorough investigation.

I would now crave your attention for a few minutes longer to a subject of a different character, but of no less public importance than the preceding ones, and perhaps, as some of you may fear, of no less practical difficulty. It is the establishment of a thorough system of alienistic medical training, by means of which there would be produced an adequate supply of competent and efficient candidates for the various positions from time to time becoming vacant in your asylums, and a better knowledge of insanity would be diffused throughout the profession of medicine. I think every experienced and closely observant superintendent will admit that a considerable lapse of time is required to convert a new assistant, however complete may have been his collegiate curriculum, into a useful asylum officer; and very few can entertain the belief that any course of mere didactic teaching, apart from thorough clinical observance and instruction, can ever meet the requirements of the position.

I am aware that in some of the asylums of America this matter has had consideration, but not to the extent, nor in the practical direction, that I should deem necessary for the end I would recommend to be held in view. I have recently been favoured by Professor Tamburini, Director of the Asylum of Reggio Emilia, in Italy, with a number of the *Gazetta del Frenocomio di Reggio*, at the end of which I have read with much gratification a notice to students and graduates of medicine of the practical operation of a system of training which seems to me to give promise of great public utility. I shall here introduce a translation of those portions of the above notice which appear to me most pertinent to the object I have in view. It reads as follows:—"The Asylum of Reggio, from its central position, its material and moral improvements, effected in late years and still in progress; from the large number of patients which it contains, and which constitute an abundant material for practical study; from its being the seat of clinical psychiatry of the Royal University of Modena, in which all the practical prelections are imparted to students; from the scientific laboratories with which it is furnished, rich in instruments, and in every means of objective and experimental research; from its being the seat of the direction and editing of the *Rivista sperimentale di Freniatria e Medicina Legale*, and consequently from the great number of scientific journals received in exchange, which enrich its library, already copiously supplied with works relating to psychiatry, it is now generally recognized as the best adapted institute for theoretic and practical instruction in this science, uniting all the opportunities for a complete education, both in the scientific sphere of the specialty, and the technicalities of management. It has therefore been designated by the Minister of Public Instruction as one of the institutions in which young men may obtain interne positions in order to perfect themselves in their studies, and already several young physicians who have completed their psychiatric studies have brilliantly distinguished themselves.

"In order to obtain the position of a medical practicant it is necessary to send in application with the diploma of graduation and all those documents which may show the distinct capacity of the candidate to the medical director, with whom rests the nomination.

"The medical practicants have residence in the

the asylum, together with free lodgings, food, light, fuel and attendance.

"Besides the daily visits and all the clinical and experimental exercises, they are required to attend, assist, and in case of absence to supply the places of, the other medical officers in the treatment of the patients and the construction of the histories of the cases; to attend the daily clinics, and to keep records in necroscopy; to aid in supervision of the service, and to give assistance in the psychiatric clinique, and in every other requirement of the institution, under the instructions of the director.

"These posts last for not less than six months, and not longer than two years.

"Practicants are also admitted for shorter periods, without the obligation to serve as the others; but these receive only lodgings in the asylum.

"Applications may be presented in any month of the year.

(Signed). "G. Fornaciari,
"President of the Commission.
"A. Tamburini,
"Director of the Asylum."

It appears to me that the preceding programme is as liberal and complete as could be desired, and it does high honor to the Government of Italy that that it has been induced to initiate a system of instruction so practically meritorious. Whether it would be possible to introduce some similar system in this country, I confess I am unable to foresee. For many years during my own asylum service I was able to carry out, on a small scale, a kindred arrangement, under which I was permitted to award residence and board to three young men engaged in the study of medicine, in addition to my regular assistant physician. Two of these young men were allowed moderate salaries, which by their fidelity and usefulness they well merited. I can appeal to my successor and his *confreres* in the three other asylums of Ontario whether the services rendered by these young men since my retirement have not been of very great value to the country. It would not become me to say more in their praise.

It has been with much regret that I have seen my cherished plan abandoned in all our asylums. I abstain from giving expression to my conjectures as to the reasons of our Government for making the change. I must, however, declare my belief that it has been a very unwise one, and a step in the retrograde direction, equally injudicious as regards the advancement of practical psychiatry, and unjust as relates to the interests of the medical profession and of humanity.

I now bring these, my last words, to a close, begging that you will regard them as those of a parting friend, whose love of your specialty, and high esteem of all its members, will endure as long as God may prolong his mental integrity.

PERNICIOUS PROGRESSIVE ANÆMIA. WITH NOTES OF A RECENT CASE RESULTING FATALLY.

By John S. King, M.D., Toronto, Surgeon to the Andrew Mercer Ontario Reformatory for Females, and Industrial Refuge for Girls.

(Read before the Ontario Medical Association, June 1st, 1881.)

The interest and importance attaching to Pernicious Progressive Anæmia—a disease, the etiology of which is generally obscure; the diagnosis so largely differential; the progress so persistent and pernicious; the treatment so unsatisfactory; and the prognosis so unfavorable—is my excuse for inviting your attention to its brief consideration, in the hope that it may aid the aggregation of reliable clinical facts, and prompt to fuller pathological investigation, by which more knowledge may be gained, and more satisfactory results attained in dealing with the disease or condition.

It will be admitted that in the rarity of this disease, we have an obstacle to its easy recognition. The literature of the subject is limited in extent, and comparatively recent, being largely embraced by the last decade. It is true that some writers on the subject have attempted to assign to it causes or origin; and have classed cases under one or other of several causes. But, with our limited knowledge, and the infrequency of meeting cases in practice, can we be justified in asserting that it is a distinct disease? May not pathological research discover some uniform change of structure in some organ or part of the body, of which the blood change is pathognomonic? I incline to the opinion that it will be generally admitted that the most that can be positively said is that the causes assigned for the existence of Pernicious

Progressive Anæmia, are, at best, but possible, or perhaps predisposing; and that the problem of its true origin still remains to be solved.

The conditions under which cases of Pernicious Anæmia originated have been differently grouped by different observers and writers on the subject. Dr. Howard, of Montreal, in his admirable paper read before the Centennial Medical Congress, held at Philadelphia in 1876, gives nine groups, embracing some sixty-two cases, as follows:—1. Pregnancy:—2. Parturition (these two being most frequent):—3. Chlorosis:—4. Chronic Diarrhœa:—5. Blood-waste (direct and indirect):—6. Dyspepsia:—7. Poor Diet:—8. Jaundice:—9. Cases with no antecedent condition, other than failing health.

In nearly every case where the microscope and hæmacytometer have been employed, it has been found that there is no actual increase in the white blood corpuscles, though a relative increase exists. On the other hand, there appears to be uniformity of opinion that there is deterioration of the red globules in number and in quality, with other probable blood changes. The health standard of the red globules in the male, generally adopted, is 5,000,000, per cubic millimeter, with a slightly less number in the female. The globular richness of blood has, however, been shown by Cutler and Bradford,—who have extensively investigated the subject—to be subject to variations due to location, general causes, time, &c., in the individual. A striking fact ascertained by means of the hæmacytometer, as first pointed out by Dr. Gowers, Assistant Professor of Clinical Medicine in University College, London, is that the corpuscular richness of the blood is seldom accurately represented by the appearance, either of the skin or mucous membranes. In Pernicious Progressive Anæmia the number of red globules falls far below the normal standard. In one of Dr. Gowers' cases reported in 1877 the number was 1,660,000; and in the other 1,640,000 per cubic millimeter. Dr. Osler, of Montreal, reports a case where the number was reduced to 970,000. In the case which I bring before your notice to-day the number is still further reduced and has been computed at 625,000 per c. m.

The diagnosis of Pernicious Anæmia is largely differential, or one of exclusion. The prominent clinical features are a small quickened pulse; increased respiration; elevated temperature; general debility, rapidly progressive and eventually extreme; well-defined vascular murmurs at the base of the neck, and systolic basic murmurs of the heart; a smooth waxy appearance of the skin, and peculiar tint; profound anæmia without obvious cause; and the peculiar blood changes of which reduction of the number of red globules is the most noticeable. The clinical history of the recorded cases points to a gradual assumption, without a fixed date of beginning, of an anæmic condition and general debility of all parts of the body, which continues progressively, eventually becoming excessive, and resisting successfully all remedial agents, resulting, with scarcely an exception, in death. Tonics, food and hygienic measures, indicated in an ordinary anæmic condition, fail utterly in this form of anæmia. During its course there cannot usually be found any apparent abnormality in the glandular system, or of any of the thoracic or abdominal organs. In the foregoing we have the chief points in the clinical aspect of a disease or condition which appears to have baffled medical treatment. Of course there is diversity in symptoms, some appearing in one case which are absent in others. In one case there may, for instance, be epistaxis, or other hemorrhages; in another, a persistent diarrhœa; in another group of cases neither of these two symptoms may present during any part of the course. The duration varies in recorded cases from five weeks to three years. The prognosis is almost invariably unfavorable.

I beg now to invite your attention to a recent case in my own practice, the patient being under observation for nearly nine months. I was not fortunate enough to secure an autopsy, and am, therefore, only able to give the history and clinical aspect of the case, which are given in extended detail as the origin is obscure.

E. P. B., aged 27 years 7 months, at death, Canadian by birth, residence recently, Toronto, married. On the 25th of August last I attended her in her first accouchement, which was a very satisfactory one, resulting in the birth of a healthy well-developed girl. There was nothing abnormal to note. The placenta was expelled in a few minutes, and there was not more *post partem* hemorrhage than is met in the average of cases. On the third day she complained of insomnia,

which readily yielded to bromide of potassium. On the seventh day, as she had no appetite and complained of feeling weak, I ordered aromatic sulphuric acid, tincture of nux vomica, and tincture of iron. Sept. 3rd, I found her sitting up enjoying fair appetite and strength and in good spirits.

Her health antecedent to the confinement was exceptionally good, the catamenia regular and normal—never had exhausting discharges, diarrhœa, epistaxis or hemorrhage of any kind. The family history was free from hereditary disease. I saw her mother, a brother and two sisters, all of whom had a robust appearance, and confirmed her own statement as to her own excellent health anterior to her confinement. The only ailment she had in adult life was a tendency to constipation of the bowels. I did not again see her until the seventh week after confinement, when I advised a repetition of her tonic, as her appetite was poor and her strength somewhat impaired from nursing the child. She used the tonic for a few days, and "feeling all right," as she termed it, did not renew her bottle. She was in easy circumstances, and had no cause for mental anxiety or undue physical exertion. During the 12th and 13th weeks, she consulted me twice for some trivial matters, and learning that she was almost wholly confined to the house, I advised outdoor exercise and a continuous use of her iron tonic for some time.

Three months elapsed before she consulted me again, or on the 26th week after confinement. On this occasion she appeared slightly anæmic, felt weak, and was easily tired. Her appetite was very poor. I observed aphthæ on the tongue and inner aspect of the lips and cheeks. She complained of occasional diarrhœa. There were no headaches, dizziness or pains; no cerebral symptoms, no hemorrhages, no lochia. She felt, as she termed it, "low-spirited without any cause for it." I ordered iron, quinine, acid, and nux vomica, with wine.

The following week I saw her. The diarrhœa being troublesome, I stopped the tonic and gave her ordinary remedies for diarrhœa. She complained that nausea was induced by the taste and even smell of certain foods. The following day there was improvement in the diarrhœa. Three days subsequently (27th week) she complained of a burning sensation in the mouth, stomach, and bowels, and could not take the iron and quinine mixture. This was accordingly stopped, and in lieu thereof I gave her chlorate of potash, tr. cinchona co., tr. nux vomica, and arom. spts. ammon. I also advised the weaning of the babe, which was complied with.

During the next fortnight (28th and 29th weeks) she appeared to improve very little, but took more nourishment. The dietary included oysters, beef-tea, eggs, and wine; milk alone disagreeing with her, lime water was added to it, but it did not even then agree with her. Cod liver oil, in the form of hydroleine, was advised three or four times daily.

I did not again see her until the 34th week. She had become profoundly anæmic, and was much thinner and weaker. Her muscles were soft and flabby, her frame emaciated, her lips and gums were blanched, eyes pearly, skin of waxen appearance, and of a peculiar light lemon tint, differing in that respect from any case I had before met. It was not as well defined as the tint of a cancerous cachexia, and differed from a jaundiced tint, or bronzed skin. Its temperature was warm, and it was free from all moisture. There was still no dizziness or headache, but an inclination to fainting and a condition of extreme lassitude. On this occasion, for the first time, I noticed a puffiness of the eyelids, while the ankles and feet were œdematous to such an extent as to make it very difficult to wear her slippers. I examined the urine, which was free or very nearly free from albumen, and was slightly acid, having a spec. grav. of 1010. I could discover no casts. I found well marked anæmic murmurs over the jugular veins, and systolic murmurs at the base of the heart, with slight tenderness in the latter region, but no apparent enlargement or valvular lesion. The lungs were normal, but the breathing was quickened, the respirations reaching 24 per minute. There was moderate tenderness over the pit of the stomach and abdomen. The liver and spleen were of normal size. The pulse was small, compressible and regular, but recorded 100 per minute; temperature 99¾. I gave her, on this occasion, gentle galvanic currents, one electrode being applied over the pneumogastric nerve in the neck, and the other over the heart, lungs and stomach in rotation. She was most sensitive to the current when the electrode was placed over the base of the heart. She was advised to continue

the iron, quinine and nux vomica mixture as well as hydroleine.

April 19th—Three days after the foregoing examination, the œdema of the ankles and feet, as well as puffiness of the eyelids, had diminished a trifle.

April 23rd (35th week)—I found the weakness increasing, pulse 110, temp. 100¼, resp. 27. The œdema still further diminished. She complained of vomiting and a total inability to retain her tonic. The diarrhœa had reappeared with greater frequency of motions. Ordered starch and arrowroot for food, the hydroleine to be continued in drachm doses four times a day, and diarrhœa mixture as before. Another examination of the urine was made with no marked change.

April 26th—The vomiting and diarrhœa still continue unabated. I prescribed Bismuth and Dover's powder.

April 28th—Pulse 112, temp. 101, resp. 28, and the diarrhœa still persisting. I continued the Bismuth and pulv. Doveri, adding plumb. acet., to be taken as before.

May 4th (36th week)—Up to this date she has never been wholly confined to her bed. I advised her to remain in bed. Pulse 120, temp. 101½, resp. 30. The respirations throughout have held the ratio of nearly 1 to 4 of the pulse. Still uses hydroleine, also arrowroot, and occasionally a little lime water, but cannot take the milk.

May 6th—Dr. Graham saw the case with me and made careful examination without discovering any lesion. As the diagnosis appeared to be between Pernicious Anæmia and Leucocythæmia, it was decided to make an examination of the blood on the 8th.

May 7th—Lactopeptine in combination with Bismuth was administered in the hope of controlling the vomiting and diarrhœa. She partook freely of buttermilk to-day, which she appeared to relish and did not vomit.

May 8th (37th week)—Dr. Graham again saw the case with me, and trial was made of the Syr. Pyrophos. Ferri. et Quin. et Strychniæ (Wyeth's) in 10 drop doses, and enemata of starch, tincture of opium and fluid extract of hamamelis, of the last two, a drachm each, while the Bismuth and lactopeptine were continued internally. However, two days' trial of these had not the slightest apparent influence in checking the diarrhœa. On this occasion a microscopical test was made of the blood. A small drop was with difficulty obtained from the finger-end, the penetration of the needle affording scarcely any pain. Its appearance was very watery, slightly tinged red. On the glass it was evident at once that there was great paucity of red globules, and but few white ones. There was scarcely any disposition to form rouleaux, and where an occasional one existed the number of globules was very small. We observed very little irregularity in size, more in shape, some few were inclined to pear-shape, others elongated. The natural shape was retained by the greater number. There were no giant corpuscles met as mentioned by Dr. Osler, nor Schultze's granular masses. Their color was pale and the surface slightly irregular. The work of computing the number was delegated to Dr. Sweetnam, whose estimation is 625,000, or the eighth of the normal standard of the male.

May 11th—Pulse 128, temp. 102, resp. 30.

May 12th—Pulse 130, very weak; temp. 103 for the first time, resp. 30 and labored.

May 13th—The puffiness of the eyelids and œdema of the ankles and feet had entirely disappeared. The patient asked for nothing, had involuntary evacuations from both bladder and bowels. She no longer vomited, had a listless look in the eyes, was much emaciated, and presented a waxy appearance; respirations 40; the temperature was not taken, and the pulse was barely perceptible. She died the following morning.

Never after her lying-in period did the catamenia appear, nor was there any lochia or epistaxis, or hemorrhage of any kind. The character of the dejections was bilious throughout. There were neither twitchings nor paralysis, and the intellect remained clear.

Dr. Sweetnam's analysis of the urine is herewith appended:—Urea, 11.5 parts in 1000; phos. acid, 1.15; albumen, a mere trace; spec. grav., 1010; color, lighter than normal; uric acid, undoubtedly below normal standard.

Belladonna in Pertussia.—Dr. Jacobi considers belladonna the most useful drug yet used in whopping cough. To be of service, however, it must be given in doses sufficient to produce flushing of the cheeks; the quantity being gradually increased, as toleration is established.—*Chicago Medical Journal and Examiner.*

PRESIDENTIAL ADDRESS.

(Delivered before the Canada Medical Association in Halifax, N.S., August 3rd, 1881,)

BY WM. CANNIFF, M.D., M.R.C.S., ENG., TORONTO.

[After expressing his thanks for the honor the Association conferred upon him by placing him in the position he occupied to-day, said, that he had decided, although somewhat a departure from the course hitherto pursued, to bring to the attention of the Association and the profession generally afresh the code of Medical Ethics which this Association adopted at its organization, hoping at the same time that the attention of the public might become engaged in a consideration of the mutual obligations and responsibilities resting upon the medical profession and the public at large.] There are some facts, some points, and some considerations not referred to in the Code, with which it may be desirable to deal.

The Code of Medical Ethics of the Canada Medical Association consists of—

1. The duties of physicians to their patients, and the obligations of patients to their physicians.
2. The duties of physicians to each other, and to the profession at large.
3. The duties of the profession to the public, and the obligations of the public to the profession.

1. It is one of the first and almost continual difficulties met with by the medical practitioner in administering to the needs of his patients, to give only the necessary attention a case in practice requires, and secure the approbation of his client. On the one hand he wishes to bestow the requisite time and thought necessary to restore the patient or allay pain, as far as the resources of medical science will enable him. On the other hand, he is often fearful that his attention may be considered unnecessarily diligent or prolonged. It is, therefore, most necessary that the physician should be fully imbued with the responsibilities of his office, consider the necessities of the case, and then unhesitatingly devote such time and energy as he believes the case demands, regardless of any other consideration. At the same time it is not improper for him to exceed what he may think necessary should the patient wish to have extra attention.

When two or more cases simultaneously claim the attention of the physician, he is bound to give the most urgent his first consideration, irrespective of the position of the patient, unless relieved of responsibility by another practitioner. The response of the physician to a professional call should always be prompt, notwithstanding the fact that he is too often summoned in unnecessary haste, and put to great inconvenience, when he might safely have made the required call in his ordinary daily round of duties. Those who have had experience know full well that there are some thoughtless or selfish people who, when they have decided to call in the doctor, desire him to neglect every one else, and come at once with all possible speed, regardless of his other duties and obligations, or his own convenience. But the physician who feels the duty he owes to those who confide in his care, will charitably make allowance for the natural anxiety which has culminated in his services being sought, and should betray no annoyance because he may have been called with unnecessary haste, and has had his arrangements for the day, perhaps, destroyed. At such times not only the sick, but the sick one's family, may not be quite responsible for their precipitate conduct.

Under all circumstances the demeanour of the physician should be calm and his words tranquil. He must not be gloomy at any time, but treat the case with a smile and all the quietness of manner it will permit. The physician should ever come into the sick chamber as a sunbeam, never as a thunder-cloud. Again, he ought to be natural in his manner. No two are alike, and every one has his peculiarities; and for one physician to try to pattern after another, is to detract from his self-reliance, and diminish his usefulness. I trust it is unnecessary for me to say to the members of the Canada Medical Association that it belongs exclusively to the charlatan to magnify the danger or nature of the disease he is called to treat, so that the recovery which will follow, perhaps, would follow without treatment, may seem to betoken great skill on his part. The most skilful and observant physician is often unable at first to determine the nature of the malady he has to contend with; but it is no disparagement in the minds of the ordinarily enlightened public to honestly state he is as yet unable to say positively what may be the matter.

Now and again we have to endure annoyance

after expressing our opinion candidly at the bedside, wishing to conceal nothing from the patient, by a member of the family, in an outer room, or at the gate, or, it may be, by a neighbour on the road, asking the question, "Now, what is your opinion? I will not tell any one." But an ever-repeated reply, that you have already given your opinion to the patient, will in time educate the public that you do not tell two stories. Of course there are occasionally cases when you cannot state fully your views in the presence of the patient; but it is a safe and proper rule to conceal nothing from him. He should know the worst as well as the best, especially when you think he is sick unto death. It is wrong to deceive, and a mistaken view that for him to learn and understand the danger, will militate against recovery. To allow one to approach the dark valley, ignorant of the terrible and solemn fact, is, in my opinion, inexcusable. On this point I am somewhat at variance with what is laid down in the Code; but I have no hesitation in saying, from experience I believe that the course I have recommended can be pursued without discouraging the patient, depressing his spirits, increasing the danger, or hastening a fatal end. No doubt "the life of a sick person can be shortened, not only by the acts, but also by the words, or the manner of a physician," as stated in the Code; but the considerate physician can so blend a true statement of the case with every reasonable ground of hope that no additional element of danger will result.

The relationship between physician and patient is one of confidence and trust. Fidelity and honor as the custodian of secrets connected with the patient, are strictly to be observed. To betray such confidence, or in any way refer to him, so that even an injurious construction can be placed upon your words, is a violation of confidence. Yet, at times, it may be difficult to observe so manifest a rule of duty. In illustration, permit me to refer to an instance in my own experience. Not very long ago while in professsional attendance upon a respectable employee in a leading hotel, I declined to answer all the questions of the manager as to the nature of the illness, (it was not a question of contagion,) whereupon I received a threat of expulsion from the building.

Moreover, to quote the language of the code, "The obligation to secrecy extends beyond the period of professional services; no circumstance connected with the privacies of personal or domestic life, infirmities of disposition, or stain of character, observed during professional attendance, should ever be divulged by the physician, except when he is imperatively required to do so."

In seemingly hopeless cases you are required "not to abandon the patient. Your attendance may continue to be highly useful to the patient and comforting to the relations around him, even to the last period of a fatal malady, by alleviating pain and other symptoms, and by soothing mental anguish." While it is your duty to candidly state your opinion when you consider the case hopeless, you must remember, not merely the old adage, that "while there is life there is hope," but that in many cases the physician is mistaken in measuring the resources of the patient's constitution to resis- and overcome disease, as well as the efficacy of his treatment. It is no infrequent occurrence to have a patient seemingly stricken with a fatal malady unexpectedly rally, perhaps for a time, perhaps to recover. I have repeatedly known the too conscientious physician superseded by the assumptious charlatan, or sectarian doctor, who reaped the benefit of the previous skilful treatment, in connection with the unsupposed power of nature to restore. It is only a few weeks since I was told by a doctor of divinity that one of the most distinguished specialists in the United States had been actually poisoning him by his treatment, and would soon have killed him if he had not been induced to go to a homœopathic establishment. Here, he affirmed, in less than forty-eight hours, he was rescued from the "current of death," and new life was infused into his system. From my knowledge of the history of the D.D., who I may say was never a patient of mine, and of the deserved reputation of the physician accused of poisoning him, I have no doubt the latter was the means of preserving his health and senses so far as he now possesses them.

The physician, old as well as young, should never object to or discourage *consultations*. In fact he should be the first to suggest one. Consultations are desirable when life seems to be in danger, or when the case is a protracted one and does not yield to treatment. The physician may feel satisfied that he quite understands the case, and how to treat it; but he must consider the wishes of those concerned and the natural solicitude of the family. Moreover, very often it is a relief to have another to share the responsibility.

It need not be considered a reflection on the physician's skill to have a consultation, even with a junior. When a young practitioner, I remember a consultation with me was objected to on the ground that it would be bringing coals to Newcastle. At the same time it must be said that a consultation may be, indeed, I fear often is, detrimental to the patient. Apart from the injurious effects the excitement may have upon the patient, it must be admitted that the consultation too often leads to a compromise, and the views of neither as to treatment are fully carried out, while the treatment of either might alone have proved successful. I read lately an extract from one of Bulwer's novels in which he defines a medical consultation as "a meeting of physicians in which the counsellors agree with the attending physician, and change the treatment." It would be in many cases a more correct statement to say that the attending physician would probably have modified, or changed his treatment at that particular juncture in the case, if a consultation had not been held. When the attending physician suggests a consultation he is usually asked to name the person he would prefer; but it is often desirable to have one chosen by the patient. It is needless to say that in the event of the physician selecting a counsellor he should obtain the services of one he deems best qualified to render him assistance in the management of the case. When the patient makes the choice, unless the one chosen be unqualified, the attending physician should unhesitatingly accept the proposal. But the physician will positively refuse to consult with one not belonging to the regular profession. It is no part of the physician's duty to his patient, in any case, to depart from this rule. A demand is sometimes made that the physician shall have in consultation one who gives to himself a specific name,—who belongs to some *pathic* school. The regular physician possessed of the honor which belongs to a learned profession, and imbued with the spirit of scientific medicine, detests any distinctive appellation in addition to physician. The followers of a sectarian school delighting in the name of homœopath, have applied to the scientific physician the term "allopath." But we recognize no such distinction. We profess to be simply scientific physicians and surgeons. Not long ago a great cry was raised by the public, especially in England, because when a great statesman was the patient, a member of our profession refused to degrade himself by consulting with a homœopath. Sir Wm. Jenner was censured unsparingly by the press because he would not violate his principles and meet Dr. Kidd. The reply to this unwarrantable attack upon our profession, by the *London Lancet*, sufficiently covers the ground, and is quite to the point. "There was nothing personal in this refusal. The course taken was that to which every practitioner of scientific medicine must have felt himself impelled. No grounds exist for consultation between the ordinary physician and the professor of a particular school. Medicine is not a science which admits of sectarian views. If two mariners, one of whom believed the earth to be a flat disc, while the other held the commonly-received hypothesis of its spheroidal form, were asked to act together in navigating the same ship on a voyage round the world, how could they co-operate? We do not wilfully refuse to meet homœopaths; we simply decline because it would be a grim farce and a practical imposition to do so. The result must be a failure of justice to the patient, which may jeopardise his prospect of recovery. The course which practitioners should pursue in an emergency of this kind is very clear." These views of the *Lancet*, a journal which represents the profession of England, are the views of the profession everywhere. We are not called upon to contend with homœopaths. We may believe them to be sincere in their profession; but we can have nothing in common with them.

Another duty of the physician to his patient is to give him judicious advice, when he has become convalescent, as to the future. This advice may refer not alone to his physical and mental well-being but also to his moral behaviour. Sometimes the sickness has been due to the faulty or vicious life hitherto led; and with the bed of sickness have come earnest resolutions to reform and lead a new life. In such cases happy the physician who can from the fullness of his heart strengthen good purposes and give proper guidance. "A word spoken in due season how good is it."

The first and second paragraphs of our code are as follows: "The members of the Medical Profession, upon whom so many arduous duties are imposed, and who are required to make so many sacrifices of ease, comfort, and health for the welfare of mankind, have certainly a right to expect that patients should entertain a just sense of the duties which they owe to their medical attendants. The first duty of a patient is to select as his medical adviser one who has received a regular professional education. In no trade or occupation does mankind rely on the skill of an untaught artist; and in medicine, confessedly the most difficult and intricate of the sciences, the world ought not to suppose that knowledge is intuitive.

The patient or the guardian should deliberately select the physician, and having done so, should not hastily, or without sufficient reason dismiss him, or call in another. There is a class of people who are continually trying a new doctor; some on account of a constitutional love of change, some because the new doctor is recommended by Mrs. Busybody, or Mr. Touter, or Miss Interested, and some again make a change to be in fashion. Others seek a change from mercenary motives, or because they do not care to attend to a long-stand-

ing, unpaid bill. To this class it is, perhaps, useless to speak about the ordinary principles of honor and decency. There can be no doubt that a physician who has become acquainted with the peculiarities of the constitution of a person or family, has a much better prospect of treating him, or them successfully than one who has no such previous knowledge. Having made a selection, there ought to be implicit trust on the part of the patient; and he should be candid and open in his communication. It is neither safe for the patient nor just to the physician to conceal anything of a physical or mental nature which bear any relation to his disorder. But while the patient should state everything which may aid the physician in the discharge of his duties, he must not make him the repository of extraneous secrets, nor should he take up the physician's time in talking about irrelevant subjects. The physician is not a talebearer and dislikes to hear gossip. At least such should be his character. * * * * *

Many persons, thoughtlessly, no doubt, will, while under the care of one physician, seek the opinion and advice of another. I do not refer to a class (I hope not large) who are ever seeking the opinion of medical men respecting their ailments in a casual way, with no intention of offering a fee; but to cases in which the patient is already under treatment, and who deliberately go to a second physician, and perhaps a third, to obtain an opinion, concealing from each the fact that he is already a patient. This is unfair and dishonourable, as any physician may by the use of different terms and language convey the idea of an opinion at variance with that of another, when in reality he holds views precisely the same. It is also reprehensible to call a physician to see a patient under the care of another, which fact is only learned when he reaches the patient; or perhaps he is kept in ignorance. This is gross injustice. We are now and then censured for refusing to see, or prescribe for a patient under such circumstances. It is not many weeks since I was called out of bed and requested by one, whose family I attend, to visit a man supposed to be hopelessly sick, who, I was informed, was under the care of another physician. I was asked to see the patient alone. Of course it is unpleasant to offend a friend, still my duty was obvious. In reply to my suggestion that the attending physician be notified for a consultation, I was somewhat sharply charged with "red-tapeism." Now, I know that my friend in this case spoke without consideration of all the duty which rests upon the physician. This is not merely a question of medical etiquette, the welfare of the public is involved. The principles which guide the profession not only protect its members from interfering with the rights of each other, but are a safeguard to the public. If medical men were in the habit of following the footsteps of one another, one prescribing to-day, another to-morrow, and so on according to the behest of vacillating and fickle persons without knowing what the other has done, it would be impossible to treat patients intelligently and with any prospect of affording relief. And yet because the physician consistently refuses to act so obviously absurd a part, he is sometimes not only censured but abused by those who it might be supposed would understand better. It is not long ago that a leading newspaper in the Dominion deliberately stated that "medical etiquette was responsible for a great deal of suffering and death," and that "the medical profession abounds in abuses." These grave and sweeping charges we may hope were made in supreme ignorance of what belongs to a learned and honorable profession, and what is due by that profession to the public. It is always open to the patient to change his doctor, but an honorable person will not do so without the gravest reasons. If the physician be doing what he can for the patient, it is most unjust to dismiss him in an extreme case of sickness.

Those who have been at any time in practice will have experienced a great difference among patients as to considering the convenience of the physician. I suppose we all are afflicted with patients who almost invariably send for us at inconvenient hours. In the country the farmer often will wait until he has finished his day's work, probably because he cannot spare a horse before that time to go for the doctor. The consequence is that he frequently reaches the physician's residence just as he has retired to bed; and you may depend upon this—it is the one who first secures a day's work out of his horse and then drives the tired brute, who will be the one to object to your bill for night service. In the city may be found those who invariably send the summons for the physician after he has started on his daily round, so that when he comes home, he has to retrace his way at once, for this class are usually very urgent in their request. There is also a class who make it a rule to call upon the physician at the hours for meals so as to catch him at home. Now, while the physician will cheerfully respond to any call when an emergency makes delay impossible, and a timely notice is out of the question, and will leave his bed or the table uncomplainingly, it is manifestly inconsiderate and exacting to cause him inconvenience, and infringe upon the hours required for refreshment and repose.

One more duty of the patient toward the physician I will refer to,—namely, to make a proper, and, if possible, prompt acknowledgment for services rendered. Why is it that the doctor's bill should so often be the last paid? And there are some who feel offended when the physician renders his account under six months or a year. The physician rarely asks for his fee when called upon,

and it should be a matter of honor with the patient to pay for services without waiting for an account to be rendered. I am speaking of those who would scorn to be regarded as intentional defrauders; but there is a class of beings, I can hardly say human, who, no matter how much care and anxiety they have given the physician, never will remunerate him, probably give abuse instead.

"2. It is derogatory to the dignity of the profession to resort to public advertisements, or private cards, or handbills, inviting the attention of individuals affected with particular diseases—publicly offering advice and medicine to the poor gratis, or promising radical cures; or to publish cases and operations in the daily prints, or suffer such publications to be made; to invite laymen to be present at operations, to boast of cures and remedies, to adduce certificates of skill and success, or to perform any other similar acts. These are the ordinary practices of empirics, and are highly reprehensible in a regular physician. In the case, however, of a physician or surgeon commencing the practice of his profession, or removing to another locality, a simple announcement by an unobtrusive card in the public prints is unobjectionable."

To the foregoing I would add, that it is objectionable for the physician to resort to any unusual method of making himself known or spoken about. By peculiar personal dress, or manner, or equipage, or office-surrounding, to gain the attention of the public, is unprofessional. Eccentricity is no longer regarded by the discerning public as an indication of genius or skill; nor will, what I may be allowed to call *loud* manners, secure the most desirable *clientèle*. There is another mode of attracting the public attention none the less a violation of the code of professional honor still pursued by a few, namely, making unnecessary display in the performance of surgical operations. And in connection with this I must refer to the unjustifiable practice, perhaps I should say criminal practice, of performing an operation without the slightest expectation of benefitting the patient. For a surgeon to mutilate a body, or increase the suffering of a patient afflicted with an incurable disease, merely to exhibit the operator's knowledge of anatomy and steady hand, is to make him an object of scorn and loathing. A surgeon who will perform, of two operations, the more dangerous one because it may give him a name, is unworthy of esteem, and should the unnecessary operation prove fatal he would be really guilty of manslaughter.

Upon the duties of physicians in relation to each other, I need not dwell, as their principles are usually inculcated when the medical education is received, and are strictly observed by the high-minded physician; and I have already made some remarks bearing upon the subject. But I may remind you, and I wish I could remind some who are not present, that in case of consultations the strictest punctuality is demanded. I regret to have to say that now and again we meet with one who, because of his standing, thinks he may transgress this law of good manners. But the law is so manifestly just that no excuse can be accepted for careless delay in keeping professional appointments. And this law applies to cases of hospital consultations as well as to private practice. No one, however much a senior or uplifted, has a right to withhold from any one he meets in consultation the treatment due to a *confrère*. For one to seek at a consultation by any mode to produce an impression upon the patient, or his friends, that the attending physician is untrustworthy, or that he himself is wiser and more skilful, is a gross violation of the golden rule upon which our code is founded. True greatness is always retiring and considerate for the feelings and character of others. It is gratifying to believe that instances of unprofessional behaviour in this respect are becoming less and less frequent. If in consultation a physician cannot accept the opinion and views of another, and believes that the welfare of the patient is involved, it is his duty to adhere to his decision, and if necessary to withdraw from the case. But such instances are extremely rare. In the words of the code.—

"All discussions in consultation should be held as secret and confidential. Neither by words nor manner should any of the parties to a consultation assert or insinuate that any part of the treatment pursued did not receive his assent. The responsibility must be equally divided between the medical attendants—they must equally share the credit of success as well as the blame of failure. The consulting physician should also carefully refrain from any of those extraordinary attentions or assiduities which are too often practiced by the dishonest for the base purpose of gaining applause, or ingratiating themselves into the favor of families and individuals." * * * * *

The physician in active practice requires yearly a rest from its cares and responsibilities. In seeking recreation he has a right to ask a neighbouring brother practitioner to officiate for him. No physician will decline to render such a service. Of course, if the period of absence be prolonged, or the absentee is rather in the pursuit of amusement than recreation, he should not receive from him who labors the fees earned. A physician who is thus trusted by another will not, if an honourable man, endeavour by artifice or intrigue to alienate the patients from their regular attendant.

The instances where a physician is justified in visiting the patient of another practitioner as a friend are very rare. If urgent business or relationship make a visit necessary, the physician will be scrupulously careful to avoid even the approach to a consideration of his disease or of the treatment being pursued.

While the physician will always consider it a

pleasing duty to give professional attendance to a neighbouring *confrère*, or his family, when asked to do so, without remuneration, he should not be requested to travel any distance or sacrifice much time without the offer of an *honorarium*, nor should he hesitate to accept it.

By mutual understanding there should be adopted in every community a tariff of fees, to be strictly observed by all. To depart from this on the part of one is to make him chargeable with double-dealing and adopting a disreputable mode of gaining popularity.

"3. As good citizens it is the duty of physicians to be ever vigilant for the welfare of the community, and to bear their part in sustaining its institutions and burdens. They should also be ever ready to give counsel to the public in relation to matters especially appertaining to their profession, as on the subject of medical police, public hygiene, and legal medicine. It is their province to enlighten the public in regard to quarantine regulations—and in regard to measures for the prevention of epidemics and contagious diseases; and when pestilence prevails, it is their duty to face the danger and to continue their labors for the alleviation of the suffering, even at the jeopardy of their own lives."

It must be said the public are not disposed to recognize the services of the medical profession, and to avail themselves of their scientific knowledge for the welfare of communities and the State. The salary for a medical health officer, or fees for professional services, are usually grudgingly paid. Notwithstanding the continued efforts of the profession to educate the public in sanitary laws, and prevail upon legislators to enact such laws and create such organizations as will prevent sickness and prolong human life, there seems to be a settled indifference on their part. It might be supposed that conduct so unselfish, indeed so calculated to diminish the ordinary work of the physician—and at the same time to secure a saving to the individual, to communities, and to the State—would engage the warmest attention of the rulers of the land. However, I am glad to be able to say that there is a probability of some action being taken by the Dominion Government. A Committee was appointed by this Association at its last meeting, "to continue communication with the Dominion Government, with a view of securing a grant towards carrying out an effective system of health registration." When the report of this Committee is presented, you will learn that the Premier, Sir John A. Macdonald, is not indifferent to the representations which the medical profession have made to him regarding vital statistics and State medicine, and that, had not illness prostrated him last winter, (an illness which I am sure all Canadians deplore,) steps would have been taken ere this to meet the wishes of this Association so far as the Constitution will permit.

Before concluding, allow me to express my deep concern that the continued sickness of our respected General Secretary has made it necessary for him to resign his post, a position he has so long worthily filled. I am sure you will unite with me in wishing his speedy restoration to health. As you can understand, the absence of Dr. David, who was quite familiar with our Constitution and the working of the Association, is a serious loss to myself in the discharge of my duties; but I am thankful to say that Dr. A. H. Wright, whom I requested to act as General Secretary, has, in making the arrangements for this meeting, very adequately filled the vacancy so unfortunately made.

I than you, gentlemen, for the kind hearing you have given me, and beg you will generously aid me in the work which falls to me as your presiding officer.

Correspondence.

CHLORAL IN STRANGULATED HERNIA.

To the Editor of the CANADA LANCET.

SIR,—The following case may interest some of your readers :—

July 10.—Was called to attend J. C., æt. 28. Found that while handling some 16-feet green planks, two hours before, he had sustained an accident in the shape of a direct inguinal hernia of the right side. At first the tumor was small, but the access of vomiting and tenesmus had caused it to increase till, on my arrival, it was about the size of a new-born infant's head.

Taxis was at once applied in the usual manner, but, though persevered in for about three-quarters of an hour, not the slightest reduction was effected, while repeated attacks of vomiting rendered, for the present at any rate, hopeless any attempt at relief in this direction. A high febrile condition, and a quick pulse, continued to give gravity to the situation, and it was felt that all of a surgeon's art must be called into requisition. The hernia was evidently, for the time being, irreducible, and probably would become strangulated. The administration of an anæsthetic and a possible operation loomed in the immediate future, but professional assistance not being at hand, I resolved to try milder means for removing the spasm at the neck of the hernial sac. Consequently the following was prescribed :—

℞. Chloral Hydrate . . . ℈ij.
Potas. Brom. . . . . ℈j.
Morph. Sulph. . . . gr. ½.
Aquæ . . . . . ℥ij. M.

SIG.—Half to be taken immediately—the remainder in half an hour.

I revisited him in two hours, hoping to have more success with the Taxis, when, to my surprise and satisfaction, I found the patient asleep, and, better still, that the hernial tumor had vanished without any manual interference whatever. There was nothing to be done except apply a truss, join in the joy of the patient and his friends, and bid them good-bye. It was evident that the relaxing influence of the draught had so removed the spasm at the neck of the hernial sac that the intestines had, as it were, flowed back, or, by their own vermicular motion, had been drawn back into the abdominal cavity.

Yours truly,

THOS. S. WALTON, M.D.

Parry Sound, Aug. 15, 1881.

MALTOPEPSYN.

To the Editor of the CANADA LANCET.

SIR,—Will you have the kindness to insert the following letter in the *Canada Lancet*, and oblige

Yours truly,

HAZEN MORSE.

Hazen Morse, Esq.:

DEAR SIR,—In reply to your letter of the 12th inst., asking our experience of the use of maltopepsyn in the Infants' Home, I beg to say, on my own account and for Dr. Pyne, whom I have spoken to on the subject, that much benefit has been derived from the employment of your preparation, wherever the use of agents required to promote digestion was indicated.

It has been found beneficial also in vomiting accompanying diarrhœa, among the infants of the Home, and *is* advantageously administered in certain forms of diarrhœa.

Yours truly,

J. H. BURNS, M.D.,
Consulting Physician Infants' Home.

Toronto, July 26, 1881.

Reports of Societies.

CANADA MEDICAL ASSOCIATION.

MINUTES AND PROCEEDINGS.

The Fourteenth Annual Meeting of the Canada Medical Association was held in Halifax, August 3rd and 4th, the President, Dr. Canniff, in the chair. About fifty members were present. The Hon. Dr. Parker, of Halifax, presented the report of the Committee of Arrangements.

Dr. Strong, Superintendent of the Cleveland Lunatic Asylum, and the Military and Naval Surgeons of Halifax were elected members by invitation.

Dr. Strong, and the Ex-Presidents present were requested to take seats by the President.

Drs. MacDonald, Slayter, Harrington, Lanigan, Townshend, and Fitch were elected permanent members. The Secretary read a communication from the Sandy Cove Sea-bathing Company, offering the use of their baths to members of the Association and their families. It was decided on motion of Dr. Botsford, that the delivery of the President's address should be the first order of business at the afternoon session.

Dr. Reid, of Mount Hope Asylum, Halifax, the Chairman of the Committee on Practice of Medicine, then read his report, in which he discussed General Paresis. It was decided to have the discussion of the report immediately after the President's address.

Dr. Stewart, of Brucefield, read the Report of the Committee on Therapeutics. The discussion to take place after that of Dr. Reid's.

Dr. Oldright, of Toronto, gave a short verbal report from the Committee on Climatology and Epidemic Diseases.

The President read the Report of the Committee on Vital Statistics. It was decided to discuss the report at a future time.

On motion of Dr. Botsford, seconded by Dr. Hingston, the following were appointed the Nominating Committee, Drs. Robillard Ross, and Fenwick, of Montreal; Eccles, of London; Clark, and Wright, of Toronto; Lawson, and J. F. Black, of Halifax; Steeves, of St. John; and Atherton, of Fredericton.

Dr. Hill, of Ottawa, read for Dr. Grant a short paper, giving a description of a new and simple kind of stomach pump. Dr. Oldright described a simple stomach pump, worked on the principle of the syphon.

The Association adjourned at 1 p.m.

AFTERNOON SESSION.

The President, Dr. Canniff, read his address on "Medical Ethics," which will be found in another column.

On the conclusion of the address the discussion of Dr. A. P. Reid's paper was taken up.

Dr. Clark, of Toronto Lunatic Asylum, speaking of Paresis, recommended that the general profession should make fuller study of that ailment, with a view to its treatment before it becomes incurable, which it generally is when it comes under treatment in lunatic asylums. He claimed that it was a disease with symptoms which could be detected long before it becomes incurable.

Drs. Jennings, of Halifax; Oldright, of Toronto; Botsford, of St. John; Morse, of Amherst, and others continued the discussion, and Dr. Reid summed it up as tending to show that if Paresis could be diagnosed in its early stage, and the patient placed under the treatment of a specialist, it was not incurable.

Dr. Stewart's paper on Therapeutics was next considered.

Dr. Jennings opened the discussion, speaking of the treatment of diphtheria, claiming to have discovered the advantages of brandy in its treatment, though some one in New York claimed the discovery.

Dr. Hill addressed the meeting on the use of chloroform, claiming that it was the best anæsthetic, and advised the administration of brandy before inhalation.

Dr. Coleman had used ether and chloroform and from his experience considered the former far safer. The Americans showed the English that ether was safer, and it had been substituted for chloroform in London hospitals.

Dr. Hingston, of Montreal, was strongly opposed to using chloroform and ether mixed. He showed the absolute necessity of having some one to watch the administration of the anæsthetic entirely. He thought more were allowed to die under chloroform than there should be. Artificial respiration was one of the best means of restoration, but was not called for in many cases, because the trouble was not with the lungs, but with the heart. In one instance he had reversed the patient, holding her feet up and head down, allowing the blood to run to the head. He considered ether safer than chloroform. Bromide of ethyl was useful where a short operation was to be performed, as it quickly brought insensibilily, and consciousness returned as soon as the anæsthetic was withdrawn; but it was dangerous where a long operation was to be performed. Bi-chloride of methyl was useful where vomiting was to be avoided.

Dr. Jennings found, in performing long operations, it was best to use chloroform till insensibility was obtained, and then to use ether.

Dr. Morse, of Amherst, attributed fatalities to long-kept or badly-made chloroform.

Dr. Atherton said, in London many deaths, he believed, had resulted from too complicated apparatus, and fear of the persons administering, causing them to lose their self-possession. In Edinburgh there was none of the latter, and less death, though the chloroform appeared to be administered even carelessly. In treatment he seldom watched the pulse, believing the first danger was indicated by cessation of respiration. He described a case in point which Dr. Allen had asked for.

Dr. Stewart regarded failure to watch the pulse as dangerous, as very frequently the heart was most seriously affected.

Dr. Atherton said it might be well to watch respiration and the pulse too, but cessation of the former was the first dangerous symptom, and the attention should be concentrated on respiration.

Dr. Oldright, of Toronto, read a paper describing a simple syphon apparatus for drawing fluid from the chest, with a practical illustration and very full explanations of the use of the apparatus, and cited cases in which he found it successful.

Dr. Allen said it was difficult to prevent the admission of air while extracting fluids from the chest, and he advocated the use of the aspirator. He found, however, that cases in which air was admitted got on just as well as where the stringent means to prevent its admission were taken.

Dr. Jennings thought a counter opening should be made through which carbolized fluid might be passed, as in the treatment of other abscesses.

Dr. Atherton advocated the use of carbolized air instead of washing out. The latter system has resulted in sudden death in some cases, and it was a question whether Dr. Oldright's system prevented this danger.

Dr. Farrell doubted whether Dr. Oldright's method would ensure exclusion of air. He had adopted a somewhat similar plan, by the use of a rubber tube, in a case he recently attended, but found the tube became occluded, and thought this difficulty would arise in using Dr. Oldright's apparatus.

Dr. Ross, of Montreal, approved of opening the chest on the antiseptic principle, but thought a large opening was preferable. He had seen cases of poisoning from the use of carbolic acid water.

The meeting adjourned at 6 p.m.

EVENING SESSION.

Dr. Bessey, of Montreal, read a very instructive paper on "Vaccine" contending for the superiority of kine vaccine. He makes a specialty of preparing kine vaccine in Montreal, keeping stock selected from the most healthy animals, and preparing the vaccine for use in the Dominion. After the paper was read a discussion ensued, and the reader answered many questions, the discussion lasting an hour. It was decided in future to confine the discussion to ten minutes on each paper.

Dr. Worthington, of Clinton, read a paper on "Scarlatina Maligna," showing his experience in many cases and the success of cold water treatment.

After a short discussion on this paper, Dr. Fenwick read a paper on "Ovariotomy," citing many cases which came under his notice during forty years' practice.

Dr. Hill, and Dr. Somers discussed Dr. Fenwick's paper.

Dr. Hingston also read a paper on "Ovariotomy," which provoked a discussion, taken part in by Drs. Slayter, J. F. Black, and others, Dr. Hingston replying.

He dwelt briefly upon the history of the operation in Canada, and gave some reasons why it had not been as successful in Canada as in Great Britain, one chief reason being that the operation had been performed with a view rather to speed than thoroughness. He alluded to cure by other than surgical means, and admitted that spontaneous cure sometimes occurred. He deprecated too early operation while yet no discomfort is felt, and before the parietes of the abdomen had undergone the process of thinning from pressure of the tumor. He gave particulars of his last fifteen operations, dwelling chiefly on the causes of death in the unsuccessful ones. With regard to adhesions be regarded those in connection with the omentum as the most formidable owing to proneness to hemorrhage, next those of the liver and spleen ; parietal adhesions were of small moment. He was averse to the use of the clamp, and spoke of the unreliability of the thermo-cautery as a hemostatic.

The Association adjourned at 11.10 p.m.

SECOND DAY.

The Association met at 9 a.m.

The Treasurer's report was submitted, and Drs. Hill, and Atherton were appointed auditors to examine and report upon it.

Dr. Slayter exhibited an ingeniously contrived, self-retaining speculum, which enables the surgeon in certain cases to dispense with the services of an assistant.

Dr. Macdonald read his paper on "Water Analysis." He showed chemicals and apparatus by which the purity or impurity of water can be detected. This paper will be published in a future number of the LANCET.

In the discussion which followed, Dr. Coleman, Hill, and Oldright, took part.

Dr. Wright exhibited, for Dr. Grant, of Ottawa, a number of spruce shaving splints, which he found very convenient and useful in the treatment of fractures.

Dr. Stewart, of Brucefield, read a paper on "Treatment of Exophthalmic Goitre by ergot," and, at its conclusion, replied to questions by Drs. Steeves and Coleman.

Dr. Coleman read a paper on "The use of the Ophthalmoscope in the Diagnosis of Brain Disease." He cited several cases and their mode of treatment, and his success in such treatment.

Dr. Jennings read a report of some cases in practice, showing the effect on the temperature of a patient on a water bed by using hot or cold water ; also some cases showing the effect of constant irrigation with carbolized water as compared with the ordinary Listerian spray and gauze. At the same time he exhibited an instrument used in the process of irrigation, which was worked on the syphon principle.

Dr. Slayter gave notice of a resolution pledging the Association to do all in its power to check the growth of specialism and specialists in medicine.

In supporting his resolution, Dr. Slayter said, the evil complained of was ruining the profession in America, and must be stopped if they ever expected to come up to the European standard.

Dr. Farrell suggested that the societies in the Maritime Provinces should be consolidated into a branch of the Dominion Association, and moved that a committee be appointed to consider the matter and confer with the various provincial medical societies for the purpose of bringing about a plan of organization of the medical societies in the Dominion in connection with the Dominion Medical Association. Drs. Clark, Canniff, Hill, Fenwick, Hingston, Steeves, Atherton, J. F. Black, Farrell, and the Secretary, were appointed such committee.

Dr. Fenwick moved, notice having been given last year by Dr. Howard, that the by-law relating to fees be amended, so as to read thus : "That every member shall pay two dollars for every meeting he shall attend." Carried.

Dr. Page made a short speech on sanitary legislation, and moved that Drs. Canniff, Oldright, Grant, Hill, Brouse, Osler, Fenwick, Laroque, Botsford, Atherton, Parker, and J. W. Macdonald, be a committee to seek from the Dominion Government improved legislation in respect to sanitation, and vital statistics, and to insist upon the organization of the profession as a condition of political support at the next election. Carried.

On motion of Dr. J. F. Black, seconded by Dr. Slayter, the Committee on Public Health was instructed to hold a conference with the committee on the same subject of the Nova Scotia Medical Society.

It was decided to defray the travelling expenses of the Secretary and Treasurer from the funds of the Association.

The President of the Association having announced that Dr. A. H. David had withdrawn from the office of General Secretary of the Association, a resolution was passed expressive of the Association's deep regret that any cause should prevent him from continuing his services, and more especially that this cause should depend upon personal indisposition. The success of the Association had heretofore largely arisen from the steady and persevering efforts of Dr. David, and this As-

sociation trusted that he might for many years witness the continued success of an institution to which he had been so devoted.

The audi.ors, Drs. Hill aad Atherton, reported having carefully examined the Treasurer's accounts, and found them correct. They show $138.35 received since last September, and $133.66 expended, leaving a balance on hand of $4.69.

Dr. Oldright gave notice, that at the next meeting he would move that clause 10 of by-laws should be amended by substituting the words, "Public health, vital statistics, and climatology," for the words, "Climatology and epidemic diseases."

The following officers were elected for the ensuing year :—President, Dr. Fenwick, of Montreal; General Secretary, Dr. Osler, Montreal; Treasurer, Dr. E. Robillard, Montreal; Vice-President for Ontario, Dr. Clark, of Toronto; Local Secretary for Ontario, Dr. A. H. Wright, Toronto; Vice-President for Quebec, Dr. F. W. Campbell, Montreal; Local Secretary for Quebec, Dr. Belleau, of Quebec; Vice-President for Nova Scotia, Dr. R. S. Black, Halifax; Local Secretary for Nova Scotia, Dr. C. D. Rigby, Halifax; Vice-President of New Brunswick, Dr. P. R. Inches, St. John; Local Secretary for New Brunswick, Dr. C. Holden, St. John.

Committee on Arrangements.—Drs. D. Clark, Oldright, Temple, A. A. McDonald, of Toronto, with power to add to their number.

Committee on Necrology.—Drs. Fulton, of Toronto; Atherton, of Fredericton; Lachapelle, of Montreal.

Committee on Education.—Drs. Eccles, London; Holmes, Chatham; and Bessey, Montreal.

Committee on Climatology and Public Health.—Drs. Botsford, St. John; Worthington, Clinton, Ont.; Larocque, Montreal; MacDonald, Londonderry, and Coleman, St. John.

Committee on Ethics.—Drs. Canniff, Toronto; Malloch, Hamilton; Gardner, Montreal; Marsden, Quebec; Bayard, St. John; Parker and W. J. Almon, Halifax; Steeves, St. John; Beaudry, Montreal, and Charles Moore, Sen., London.

Committee on Publication.—Drs. Ross, Montreal; Cameron and Fulton, Toronto; the General Secretary and Treasurer.

Committee on Practice of Medicine.—Drs. Lawson, Halifax; Graham, of Toronto; Duncan, of Bathurst.

Committee on Surgery.—Drs. Sheppard, of Montreal; J. F. Black, of Halifax, and McFarlane, of Toronto.

Committee on Obstetrics.—Drs. Temple, of Toronto; Trudel, of Montreal, and McLaren, St. John.

Committee on Therapeutics.—Drs. Tye, of Thamesville; Wilkins, of Montreal, and Somers, of Halifax.

Votes of thanks were passed to the President for his able conduct in the chair, and interesting address; to the Railway and Steamboat Companies; the Local Government for the use of the Council Chamber; the Sandy Cove Bathing Company; the local medical men; and to the Acting Secretary, Dr. Wright.

The Association then adjourned, to meet in Toronto on the first Wednesday in September of next year. After adjournment the members, at the invitation of the Commissioners of Public Charities, visited Mount Hope Asylum for the Insane, where they had lunch, and afterwards an excursion on the harbour and North-west Arm.

HURON MEDICAL ASSOCIATION.

The regular quarterly meeting of the Huron Medical Association was held in Exeter on July 5th, Dr. Sloan, of Blyth, President, in the chair. The following members were present:—Drs. Sloan, Holmes, Hyndman, Worthington, Williams, Irving, Graham, Gillies, Campbell, Hurlburt, and Stewart.

Dr. Hyndman exhibited the following cases :—

I. A case of extensive necrosis of the femur in a lad aged 14.

II. A case of necrosis of the humerus with anchylosis of the right elbow joint, and osseous union of the heads of the ulna and radius in a boy aged 15.

III. A case of probable disease of the upper cervical vertebræ in a child aged two years.

IV. A case of long-standing contraction and induration of the left lung in a girl, aged fifteen years.

V. A large nævoid tumor affecting the cheek of a child aged two years.

Dr. Irving, of Kirkton, showed a very well-marked example of infiltrating carcinoma of the right breast in a woman, aged 45. The malignant disease in this case followed closely on the formation of an abscess in the breast, and it was some time before the diagnosis of carcinoma could be confirmed on account of this history.

Dr. Sloan exhibited a young man whose pleural cavity he opened recently for the treatment of an empyæma. The operation was performed with antiseptic precautions. When he first came under Dr. Sloan's care he had been ill for several weeks, and had spat up large quantities of pus which was due (according to his previous medical attendant in Michigan), to the pus in the pleural cavity finding its way into the lung texture. He soon ceased to expectorate pus, and when first seen by Dr. Sloan there was physical evidence of the presence of a large quantity of fluid in the right pleural cavity. The temp. varied from 102° to 103° F., the pulse was constantly elevated, and the respiration quickened. The introduction of an aspirator

needle confirmed what was suspected, an empyæma. Under the spray Dr. Sloan made a free incision into the pleural cavity, and gave exit to about a pint of sweet-smelling pus. Only three dressings were required. The man in a few weeks increased 40 lbs. in weight, and is at present in excellent health.

Drs. Stewart and Hurlburt showed the following cases :—

I. A female child, aged 19 months, who has lost in a great measure the motor power of all extremities. There is also loss of power in the neck and trunk muscles. The little patient is unable to stand even with assistance. With assistance it can sit, but not otherwise. There is marked tremor in all muscles brought into action. This tremor is absent when the muscles are at rest. There is also marked loss of muscular sense in the upper extremities. The disease is now of four months standing, and made its appearance slowly. There has been no elevation of temperature. The little patient has actually gained in flesh during the last two months. There are fits of explosive and causeless crying.

The child had been in good health and was able to walk before the present trouble began.

II. A man, aged 37, who has stenosis of the tricuspid orifice and disease of the left heart also. When first seen, six weeks ago, he wished to get relief from a severe headache, which was constantly troubling him. This headache was much more severe when he lay down, so much so was this the case that he had to pass many nights sitting on a chair. He has never been what is commonly called a strong man. He, however, never felt or showed any symptoms of his present trouble until about six or seven years ago.

Present state.—There is distinct bulging of the cardiac region, and a presystolic thrill is felt when the hand is laid over these parts. The transverse cardiac dulness reaches (on a line with 4th rib) from ¾ of an inch from right border of sternum to 4 inches from its left border, a distance of 6¼ inches. The vertical dulness extends from the upper border of the 4th rib downwards. A presystolic murmur having its maximum intensity over the sternum at the level of the 4th costal cartilage and a systolic murmur, louder, over the mitral area are heard. The heart's apex is between the 5th and 6th ribs, and on the nipple line. There is great fullness of the veins of the head, face and extremities. There is distinct jugular pulsation. There is great fullness of the veins of the fundus oculi, and the discs are both good examples of "choked discs." There is, however, no loss of sight. The pupils are firmly contracted and resist the mydriatic action of atropine to a considerable extent. The atropine quickly paralyzes the accommodation. There is no œdema of the extremities, and the urine although scanty is free from albumen. The pulse is generally about 60, and regular. Tracings taken from the radial and jugular were shown. For the last three weeks he has been taking full doses of calabar bean, with the object of relieving the over-filled veins, and headache caused thereby. It was, however, found not to act so beneficially as digitalis, which was previously prescribed.

III. A case of Splenic Leucocythæmia. The patient, a man aged 47, had intermittent fever for nine months, 16 years ago, in Tennessee. Three years ago he felt weak, and had palpitation of the heart. It was only 10 months ago that he first noticed "a lump" in his left side. It rapidly increased in size until six weeks ago, since which time it has diminished somewhat. During the months of April and May of the present year he had daily attacks of chills, fever and sweating. When first seen (June 1st, 1881), his temp. was constantly elevated (100° to 101°)

Present state.—The spleen extends from the 6th rib to within two inches of the ilium in the mamillary line, a distance of 7½ inches. In the transverse direction from one inch to the right of the umbilicus to within four inches of the spinal column, a distance of 11½ inches. There is no abdominal pain or tenderness. The liver extends two finger breadths below the ribs. There is no enlargement of any of the lymphatic glands, nor is there tenderness over any of the bones. Blood : 2·500·000 red, and 147·000 white cells in a c.m.m., being a proportion of 1 to 17. The amount of hæmoglobin was not estimated. The red cells vary in size considerably, as also do the white. Many of the latter are very granular, and a good deal of free granular matter is to be seen. He sleeps well. The appetite is good, and the bowels are regular. Only on one occasion has he had epistaxis. There is a considerable amount of œdema of the lower extremities. About six weeks ago he commenced taking quinine and arsenic. There is no elevation of temp. now, and he has gained 10 lbs. in weight. The spleen has diminished slightly in size, but there is no improvement in the state of the blood.

Drs. Stewart and Hurlburt showed also the following microscopical sections :—

(1.) Spleen and liver from a case of leucocythæmia.
(2.) Spleen of intermittent fever.
(3.) Melanæmia of the brain.
(4.) Simple hyperæmia of the brain.
(5.) Tuberculosis of the pericardium.

CO. GLENGARRY MEDICAL ASSOCIATION.

The Glengarry County Medical Association held its quarterly meeting in Alexandria, on the 7th of June, 1881. The Chairman having taken the chair, the minutes of the last meeting were read

and adopted. Letters from Drs. Hunt, Harkness and Falkner, expressing sympathy with the Society, and regretting inability to attend, were read by the Secretary. Drs. McDermid, McDiarmid, Chisholm, and McMillan, were appointed to read papers on medical items at the next meeting of the Association.

Moved by Dr. Chisholm, and seconded by Dr. McDiarmid, that the Secretary be instructed to communicate with the licensed practitioners of the County of Prescott, with a view to co operate and unite with this Association. Carried.

The following gentlemen then read papers on the subjects following their names, viz. :—Dr. Chisholm, on "Medical Ethics," Dr. McDiarmid, on "Pelvic Cellulitis," Dr. McDermid, on "Typhoid Pneumonia," and Dr. McMillan, on "Pyæmia," all of which being short, pithy, and to the point, elicited a lively and animated discussion. Dr. McDonell then read the notes of an interesting case of "Erysipelas of the Knee," occurring during the eighth month of pregnancy, inducing premature labour, with recovery of both mother and child. The meeting then adjourned, to reassemble on the first Tuesday in September.

Quinte and Cataraqui Medical Association.—A meeting of the medical profession of the "Quinte and Cataraqui Division" met in Picton on the 12th ult., by appointment of Dr. H. W. Day, the territorial representative, for the purpose of establishing a Medical Association for said Division. Resolutions regarding the organization of the Association were adopted in accordance with the provisions of the "Ontario Medical Act." Officers for the remainder of the year were elected as follows :—President, Dr. H. W. Day; Vice-presidents, Drs. Platt, Burdett, Metcalf, and Beeman; Local Secretary for Quinte, Dr. Farley; Local Secretary for Cataraqui, Dr. Henderson; General Secretary and Treasurer for the Association, Dr. A. C. Bowerman, Bloomfield.

New Brunswick Medical Society.—The above Medical Society was inaugurated in Fredericton on the 19th of July. About 35 members were present, a large number being from St. John. A constitution and by-laws were adopted, after which the following officers were chosen for the ensuing year :—President, Dr. Steeves, St. John; Vice do., Dr. Earle; Secretary, Dr. Duncan, Bathurst; Corresponding Secretary, Dr. Patterson; Treasurer, Dr. Berryman. The Society elected the following gentlemen to serve as members of the Medical Council of New Brunswick: Drs. McLaren, Hamilton, Travers, Atherton, and Vail. The next annual meeting of the Society will be held in St. John on the third Tuesday in July, 1882.

Selected Articles.

CASES IN HOSPITAL PRACTICE.

CLINIC BY AUSTIN FLINT, M.D., NEW YORK.

Hemorrhagic Diathesis.

The case of anæmia from hemorrhage, which I showed you at a former meeting, is not progressing as favorably as we would desire. He had a tooth extracted, and the bleeding from the socket continued for some time before it could be arrested. After that he had hemorrhage from the nose, and yesterday the anterior and posterior nares were plugged. The plugs were removed this morning, but the hemorrhage returned again, and the nose had to be replugged. It is a good case illustrative of the hemorrhagic diathesis, which we hoped in this instance was acquired. But the patient now informs us that his brothers also have the same tendency to bleeding, so that it appears to be hereditary. I will not stop now to discuss the causation of the hemorrhagic diathesis, or to speak of the hereditary, the congenital, or the acquired forms, but would recommend you to read up what has been written upon the subject. I am sorry to say, however, that you will not be able to find an altogether satisfactory explanation of the pathological condition. It was supposed at one time to be dependent upon a deficiency of the fibrinous constituents of the blood, but that has been disproved, and it is the prevailing impression now that it is due to some state of the terminal branches of the arterial system, rather than to the condition of the blood itself.

Bright's Disease.

The patient before you, gentlemen, is a substitute for one whom I had intended to present to you, but cannot, for the best of all reasons, viz., he is not in life to-day. It was a case of a complication of ailments, one of which was an affection of the kidney. He had a thickened pleura, and some solidification of lung on one side. The object which I had in view in selecting that case was, to illustrate the way in which we are liable, without due care, to be deceived respecting the presence of liquid in the pleural cavity. That patient had marked flatness on percussion at the base of the chest, and there was also absence of the respiratory murmur, and from these two signs the natural inference at first would be, that there was liquid. There was none, however, as was shown by the introduction of the hypodermic syringe. I meant to have shown the case as illustrative of the importance of vocal resonance in preventing error of diagnosis; vocal resonance continued down to the very base of the chest, which was conclusive evidence that there was lung there, irrespective of the

demonstration by the hypodermic syringe. In the absence of that patient the doctor has brought up this patient, whom I have not seen before, and to whose case we will devote only a short time. I will read from the recorded history:

Samuel ——, sixty years of age, a native of Ireland, a tailor, admitted on the 10th of this month; nothing important pertaining to his family history. His personal history is as follows:—He has always been accustomed to the use of alcoholic beverages, sometimes taking them in considerable quantities. He had been drinking a large amount of beer for two or three days before his present illness, which commenced three weeks ago. The first thing he noticed was œdema of the scrotum and of the penis; then the legs and feet began to swell, and he became puffy about the eyes; he had considerable pain in the head, misty vision, spots before his eyes, and vertigo, also a feeling of great oppression at the stomach, with nausea, pain in the loins. He noticed that he passed less water than usual, that it was very dark, and had pain in the end of the penis during its passage. On admission, the lower extremities were œdematous, likewise the scrotum and the eyelids. He complained of pain in the back, of loss of appetite, and a general feeling of malaise. Physical examination of the chest showed the lungs to be normal, the urine was amber colored, cloudy, of a specific gravity of 1 010, acid, and contained about ten per cent. of albumen, the whole quantity being 21 ounces. He was put upon the bitartrate of potash, and upon the infusion of dog-grass, or triticum repens, as a diuretic. On the 11th he passed 24 ounces of urine, and on the 12th, 48 ounces, so that the dog grass seemed to have had some diuretic effect.

Such, gentlemen, is the history, and the first question which arises is: Is this an acute diffuse nephritis, or is it some one of the several chronic forms of renal disease? That is a question which often presents itself to us, both in private and hospital practice. The patient, as in this case, notices first œdema of the limbs, then œdema of the face, increasing more or less, and with that, loss of appetite, impairment of strength, some pain in the back, general debility, the urine scanty, dark colored, smoky, and even black in some instances, the specific gravity usually high. Now, with the exception of the last fact, what I have just stated is a synopsis of the history of this case, and that group of symptoms points to acute diffuse nephritis; and if we are quite sure of that, and that there was no anterior affection of the kidney, we may always entertain a favorable prognosis, we may expect the patient to recover. There are some exceptions to that rule, but we have a right to expect recovery. We have also a right to expect that the acute will not be followed by a chronic form of the disease; but there are exceptions to this rule also. We did not see the urine when it was dark, as this patient describes it, for it loses this dark color after a while, and this patient had been sick three weeks before he entered the hospital. This dark color, by the way, is due to the presence of hæmatine, and sometimes the urine presents very distinctly a bloody appearance.

In concluding that we have a right to infer that this patient has had an attack of diffuse nephritis, an important question beyond that is, did this attack of acute nephritis occur when the kidneys were healthy, or was it superadded to a chronic affection? This latter fact obtains not infrequently. There are two points in this case which have a bearing on that, and these two facts are opposed to each other. The low specific gravity, with the small quantity of urine which the patient made when he entered the hospital, are not very consistent with simple acute nephritic disease, and yet it would be wrong to base a positive judgment upon an isolated fact like that. So far as that goes it would rather tend to show that there was an old affection prior to the development of this acute affection. The other point is this, that the lungs are normal. If this patient had a chronic form prior to this acute affection, it probably was a fibroid or contracted kidney, which leads after a time to enlargement of the heart, without, of course, valvular lesion. If, then, we were to find in this case hypertrophy of the left ventricle, it would be a very strong point as regards the prior existence of a chronic renal disease; and the fact that the left ventricle is not enlarged does not bear as strongly against chronic renal disease, although it has a certain amount of weight on that side. On examining his heart I cannot detect anything abnormal, so that we are justified in considering it probable that this is an instance of acute diffuse nephritis, which is progressing favorably under the use of simple diuretics, and if this view be correct we may look forward in a week to much more improvement in the patient's condition, expecting that the urine will increase in quantity up to the normal, be increased in specific gravity, that the albumen will be diminished, that the little dropsy which he now has will have disappeared, and that he will be improved in all respects.

Heart Disease.

It occurs to me, gentlemen, to mention some circumstances which relate to the diagnosis of functional disorder of the heart. I received a letter yesterday from a medical man who lives at a considerable distance, who is very anxious on the subject of disease of the heart; he said in his letter that he was about fifty years of age, and he had during nearly half that period been actively engaged in the practice of medicine; for ten years or longer he had suffered at times from an affection of the heart which rendered him very anxious; and for a long time he had been intending to come

and have me examine his heart, but something prevented. Within the past few weeks the disturbance of the heart was very great. He wanted to know if it was possible for me to come and see him. I relate this circumstance with a view of impressing upon you two or three points. I have scarcely any doubt that that man is suffering from a purely functional affection of the heart. Why? Because he has had a disturbed action of heart, off and on, for a long time, and if that disturbed action were due to an organic lesion, matters would have developed in a very decided way before this. Then he does not mention that he has any dropsy; he only mentions disturbed action of the heart, and some disturbance of the respiration. He also mentions that he has been a sufferer from dyspeptic ailments during pretty much all his professional life. In my answer today, I told him he could settle the matter almost certainly himself, and in a very simple manner. If he found the apex beat in the fifth intercostal space, near the vertical nipple line, and the resonance on percussion equal, just without the nipple on the two sides of the chest, he might feel sure that his trouble was purely functional. Now, those are very simple points to ascertain. Anybody can ascertain where the apex beat of the heart is, and it is very easy to determine whether the resonance at the points indicated be equal. Now, why was I warranted in saying that? Because, if the resonance and the apex beat of the heart be found as stated, enlargement of the heart may at once be excluded; and if there be no enlargement of his heart, his trouble must be functional, even if we assume that there be valvular lesions, for valvular lesions do not lead to disturbance of any great amount until they have led to enlargement of the heart; and if, then, there were no enlargement of the heart, which would exclude any organic trouble, he would know that it was a functional disturbance, and need not worry. Thus I wrote him, and told him to try to relieve his dyspeptic ailments by tonic remedies, by taking good substantial diet, which is the proper treatment of dyspeptic ailments in general; to take a little wine, under scriptural injunctions, and for the reason given in scripture, and to get a little change of scene, without the annoyance incident to medical practice; and another very important thing, to put the heart as far as practicable out of his own mind, and never to feel of his pulse, or try to listen to his heart sound. I venture to say, that I shall get a reply by and by, saying that he is comfortable, easy.

Dysentery.

I shall detain you but a few minutes with our next patient. I am told that it is a case of dysentery, which is an important subject, being a common disease, and a good deal might be said about it, but we have other cases which we want to present, and our time is limited.

Her name is Sarah ——, thirty-two years of age, a native of Ireland, a domestic. Admitted on the 11th of this month, day before yesterday. She is a hard working woman, employed in a laundry, exposed to variations of heat and cold, and on the sixth of this month was taken with a severe pain in the stomach, followed by vomiting and passages of a diarrhœal character. The diet had been simple, containing nothing to which the symptoms could be attributed. The colicky pains soon became more severe; she lost her appetite, and suffered from a general feeling of malaise. The next day the dejections were more numerous and mucous in character, and accompanied by tormina and tenesmus, those two classical symptoms which are diagnostic of dysentery. Then the dejections became muco-sanguineous, with almost constant desire to go to stool, although but a small amount was evacuated. You see the dysentery was preceded a day or so by diarrhœa, which is always the case, the diarrhœa lasting a variable length of time; then she had the characteristic stools, mucus and blood, or bloody mucus, accompanied by tormina, griping pains, and tenesmus, a sensation as if the rectum was full, giving rise to a strong desire to make effort at defecation—a sensation due, not necessarily to the presence of anything in the rectum, but to an inflamed condition of the mucous membrane.

She complained, on admission, of great prostration, of anorexia, of soreness and pain in the abdomen, together with the symptoms above described. The stools muco-sanguineous, sometimes almost pure blood. The temperature was 101°, the pulse 110.

This patient got half an ounce of whisky every two hours, and ten grains of the subnitrate of bismuth every three hours, and also tincture of opium, tincture of aconite, and the chalk mixture. During the night of the 12th she had five muco-sanguineous passages. She says she feels weak this morning. The above prescription was changed by increasing the opium at each dose, regulating the quantity by the effects upon the respiration. The respirations went down to seven a minute, when the medicine was stopped, and one ninety-sixth of a grain of atropia was given hypodermically, and gallic acid was given during the day. The next night the passages were diminished in number, being only three. The patient's appearance is better to day.

I would simply direct your attention to the treatment in this case, saying that I believe it is the correct one; and would add that if, by manipulation of the abdomen and by the character of the stools, you can satisfy yourself that there is fecal matter in the intestines, they had better first be evacuated, after which, as I am well convinced,

the proper treatment for dysentery is the employment of opium in some form, carried up to a point of comfortable tolerance; and I introduce this case as illustrative of that method of treatment, and of its probable success. In a disease of this form, which involves no danger to life, the treatment is a mere question of relief and shortening the duration of the disease. I believe that by this method of treatment we can accomplish these ends; at the same time we are to bear in mind the fact, which was established in this hospital some years ago, that dysentery is a self-limited disease, running its own course, and ending in recovery, with some rare exceptions, its average duration being about eight or ten days; still, I believe that we not only mitigate, lessen the extent of the disease, but shorten its duration, by resorting to the use of opium.

FAURE'S STORAGE BATTERY AND SWAN'S ELECTRIC LIGHT IN SURGERY.

George Buchanan, Prof. of Clinical Surgery University of Glasgow, gives the following in the *Brit. Med. Journal*, of a recent date.

The recent invention of M. Faure has rendered electricity available for surgical use in a way it has not been before. It consists of a cylindrical vessel of lead, nine inches high and five inches in diameter, with a leaden bottom, but open at the top; into this is packed a kind of cushion of a material which has the power of absorbing electricity. To this vessel are attached the two poles of a working battery, and as long as the connection is maintained the vessel accumulates the electricity flowing into it. When charged it can be detached from its connection and kept for a long time, or carried from place to place. When required for use, the cushion, which should always be kept moist, is wetted with dilute sulphuric acid, and wires connecting are attaching to its poles, when it is converted into a powerful battery.

On June 3d I removed a nevoid tumor from the tongue. The nevus was situated upon the anterior half of the right side of the tongue of a young gentleman eleven years of age. It had been in existence for many years, but latterly it had frequently been scratched and then bled freely. As the growth was very vascular and invaded the tongue almost to the middle line, I determined to remove it by the thermocautery. Having occasion to see Sir William Thomson the day before the operation he offered me the use of a Faure's battery, which had been sent from Paris only a few days before, and on which he was engaged in experimenting to test its value. He was so enamoured of its powers that he said, "It is a witch." And now it has the name of the "Electrical Witch" at the University.

In driving to my patient I called at Sir William's laboratory and got with me a battery which can easily be carried in one hand, and without the least difficulty. After having put the patient under chloroform, I attached its poles to a platinum wire ecraseur, and removed the tumor without a drop of blood.

This contrivance which enables one to carry stores of powerful electricity in a jar no bigger than an ordinary preserve-meat tin, will render the use of electricity much more extended than heretofore. Supplies of these cumulative jars are being sent from Paris, and can be charged by any kind of battery to which they are attached.

Swan's Light.—This light is specially useful in examining parts of the body or tumors, which we wish to test by transmitted light. I have under my care just now a man who is compelled to be in the recumbent posture, from a severe fracture of the thigh. He has also a tumor in the scrotum with all the characteristics of a hydrocele; but it was almost impossible to judge of its transclucency in consequence of its being bound down to the groin, and being of very old growth was intersected by bands which made it more or less opaque. It was impossible, in the man's fixed position, to get a candle or lamp placed so as to judge of its translucency. At the same time as Sir William Thomson offered me the battery before alluded to he suggested that Swan's light might be used for surgical investigations. He kindly provided me with a very powerful battery of the ordinary kind, sent his mechanical assistant to fit it up in my ward, and gave me a Swan's electric light lamp. This is a globe of glass about an inch and a half in diameter, containing a filament of carbon wire twisted into a loop, which when rendered incandescent by the battery, gives out a powerful light. This globe, which is held by a handle of glass tube about four inches long, can be placed in any position; and, as it is not heated beyond what can be easily borne by the skin, it can be placed in actual contact with the tumor in any place without danger of setting fire to the bedclothes. It proved most successful, for even in the ward of the hospital, where the bright sun could not be effectually shut out, the translucency of the hydrocele was made apparent to every student.

TREATMENT OF PNEUMONIA DURING THE FIRST STAGE.—Prof. Alfred L. Loomis, in *New York Med. Record*, says in regard to treatment: What measures shall we employ to overcome or mitigate the impression made upon the nervous system by the morbific agent which is operating to produce the pneumonia? The experience of the past eighteen months leads me to state with some positiveness that in opium we have such an agent. My rule for the past year has been to bring my

patient under the full influence of the drug at the onset of a pneumonia, and to hold him in a condition of comparative comfort until the pneumonic infiltration is completed (usually for the first four days of the disease). After this period, the greatest care must be exercised in its use, for now a new danger threatens—namely, paralysis of the bronchi, and consequent accumulation of secretion in the bronchial tubes—which will greatly increase the difficulties of respiration; but during the developing period of the disease, when the pneumonic blow is first struck, morphia hypodermically seems to lessen the nervous shock and to diminish or pevent the effect of the pneumonic poison on the nervous system, until the first violence of the poison has been spent in completing the pulmonary infiltration. The use of opium in this way does not interfere with the usual antipyretic treatment of the disease, nor does a demand for alcoholic stimulants contra-indicate its use. The results which have followed this plan of treatment in the limited number of cases in which I have been able to fairly test it (in patients that have been directly under my personal management) have convinced me that it greatly diminishes the chances of heart-failure, and cases which from their age and attending circumstances seemed hopeless have recovered. The great relief and comfort which the use of opium in this way gives to the pneumonic sufferer during the first four days of his struggles are sufficient to commend it, especially in those cases where an extensive pleuritic inflammation accompahies the pneumonic development.

Removal of the Kidney for Nephrolithiasis.—At the Charing-cross Hospital is a lad aged fifteen, from whom Mr. Barwell removed a kidney on May 5th, and who is now convalescent. The boy had been under observation for about a year with pyelitis and retro-peritoneal abscess. An incision was made about ten months ago, with the effect of mitigating the symptoms. The wound had healed, leaving only a sinus. In April, by sounding through this passage, Mr. Barwell detected a stone. Yet although the lad was becoming very anemic, with irregular hectic temperature, no consent for operation could be obtained until the above date, when lumbar nephrectomy was performed. Two peculiarities rendered the removal unusually difficult—viz. the dense thick cicatricial tissue and the proximity of the rib to the ileum. Mr. Barwell cut through the tissues, and came upon the kidney with the stone impacted. An endeavour to extract this latter caused copious bleeding, hence the operator rapidly enucleated the gland and passed a ligature round the pedicle *en masse*. Since want of room forbade removing the kidney entire, it was divided and extracted in two parts. The operation was thus completed very quickly, and with scarcely any loss of blood. Since then the boy has been going on uninterruptedly well, his temperature becoming normal and regular, the wound being now nearly healed. This is, we believe, the second successful case of removal of the kidney for stone.—*London Lancet.*

Medical Mission.—A "Medical Mission" was formally opened last month, at No. 5 East Broadway, New York, Dr. Agnew presiding, and Rev. Dr. Taylor delivering the inaugural address. The object of the mission, as stated in a published circular, is "to reach that numerous class of poor persons, always to be found in a large city, who are generally inaccessible to the Gospel, by giving them gratuitous medical relief, and at the same time preaching the Gospel to them, thus linking together in the missionary physician, efforts to heal the body and to save the soul." The first medical mission in the United States was established in Philadelphia, two years ago, and the second at Chicago, about a year since, in charge of Mr. D. L. Moody. Among the board of managers of the New York institution are Mr. Cornelius Vanderbilt, Mr. Benj. C. Wetmore, and Robt. Hoe, Jr.

Fatal Result from the Application of Sayre's Jacket.—The patient, a child, suffered from a considerable kyphosis at about the junction of the dorsal and cervical vetebræ It was restless during the suspension; suddenly the breathing stopped. Immediate tracheotomy showed the trachea free down to its bifurcation, and consciousness could not be restored. The breathing was stertorous, and the child died one and a half hours after the suspension. The autopsy revealed a very marked angular curvature of the spine and a very large abscess reaching to the mediastinum. —*Proceedings of German Surg. Society; Deutsche Med. Wochenschrift; Maryland Med. Journal.*

Lemon Juice in Diphtheria.—Dr. J. R. Page of Baltimore, in the New York *Medical Record*, May 7, 1881, invites the attention of the profession to the topical use of fresh lemon juice as a most efficient means for the removal of membrane from the throat, tonsils, etc., in diphtheria. In his hands (and he has heard several of his professional brethren say the same) it has proved by far the best agent he has yet tried for the purpose. He applies the juice of the lemon, by means of a camel's hair probang, to the affected parts, every two or three hours, and in eighteen cases on which he has used it the effect has been all he could wish.—*Med. and Surg. Report.*

Crude Petroleum in Phthisis.—It is claimed that good results have been obtained by the use of crude petroleum in phthisis. It is given in four grain doses in pill or capsule.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science

Issued Promptly on the First of each Month.

☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.*

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'.' This Journal has the LARGEST CIRCULATION of any Medical Journal in Canada.

TORONTO, SEPTEMBER 1, 1881.

THE INTERNATIONAL MEDICAL CONGRESS.

The seventh meeting of the International Medical Congress, held in London on the 3rd of August and following days, was the event of the season, so far as medical affairs are concerned, and one of the landmarks in the history of medicine in the 19th century. Never before, in the history of the world, was there such a large gathering of representative medical men, nor such a galaxy of the lights of the medical profession, as were assembled together from all parts of the civilized world on that occasion. Every other meeting, and we were almost going to say everything else, dwarfed into insignificance in comparison. The very interesting meeting of Pharmaceutists, from all parts of the world, held during the first three days of the week, was completely overshadowed by its gigantic congener, the International Medical Congress. Even the meeting of the British Medical Association, held subsequently at Ryde, in the Isle of Wight, and which is usually regarded as the great medical event in England, was for the moment almost entirely lost sight of, although reports that have reached us, just before going to press, would tend to show that it was on the whole a very successful gathering.

Upwards of three thousand two hundred persons registered their names as members of the Congress, one hundred and nineteen meetings of sections were held, and four hundred and sixty-four written and three hundred and sixty spoken communications were made. The business of the meeting, such as the reading and discussion of papers, was carried on in one of three languages—English, French or German—at the option of the individual. The meeting, which was under the patronage of the Queen, was honored by the presence of His Royal Highness the Prince of Wales and the Crown Prince of Germany, the former of whom made a most appropriate speech, in which he recognized the important part which medicine plays in the life of a nation. The opening address was delivered by Sir James Paget, who amply maintained his high reputation for eloquence,—his speech being remarkable both as a scientific production and an oratorical feat. Of all the addresses delivered before the Congress, that in favor of vivisection, by Prof. Virchow, attracted most attention. The distinguished German's appearance on the platform, together with Paget, Jenner, Charcot, Langenbeck, Pasteur, Volkmann, Esmarch, Kuester, Pantaleone, Pancoast, Flint, and others of equal eminence, called forth a perfect ovation.

The addresses which were delivered in the General Sessions were, almost without exception, of the highest order of merit, and medals of honor were presented to each of the orators as a suitable tribute to the value of the services rendered. The work carried on in the sections was of the greatest interest, and, on the whole, of a practical character, especially in the sections on Surgery and Obstetrics. All the leading sections—Medicine, Surgery, Obstetrics and Pathology—were largely attended, and much interesting and profitable work was accomplished. Some degree of confusion and want of appreciation was occasioned by the difference of language that prevailed among the speakers—first one in English, another in French, a third in German, and so on; but, on the whole, though somewhat bewildering at times, matters worked with comparative smoothness.

The entertainments were on a scale of magnificence that could scarcely be surpassed. On the evening of the first day (Wednesday) a brilliant *soiree* was given at South Kensington, which was honored by the presence of the Prince of Wales and Crown Prince of Germany. On Thursday evening a banquet was given by the Lord Mayor to 300 representative members of the Congress at the Mansion House, the majority of the guests being distinguished foreign surgeons and physicians. The toast of "Our Foreign Visitors and Guests"

was coupled with the names of Professor Von Langenbeck for Germany, Professor Trelat for France, Dr. Pantaleone for Italy, and Dr. Austin Flint for the United States. On Friday the Lord Mayor and Corporation gave a grand reception at Guildhall. On Saturday a large number of garden parties and private receptions took place, and on Sunday many of the museums and picture galleries were thrown open to members of the Congress. On Monday a visit was made by a party of the members to the telegraph works at Woolwich, and the steamship *Faraday;* another party visited the docks in the morning, and in the afternoon attended the garden party given by the Baroness Burdett-Coutts at her residence at Highgate. In the evening a conversazione was given in the museum of the Royal College of Surgeons. One of the most pleasant excursions was that to Folkstone to witness the unveiling of the statue of Harvey by Prof. Owen, C.B.

Considerable dissatisfaction was caused in some quarters by the decision of the Congress not to admit lady doctors as members, and a vigorous protest was entered by a large number of properly qualified lady practitioners, but no attention was paid to it. The remarkable success of this great meeting (and there can be only one opinion as to its success), was due, in a great measure, to the able management of Sir James Paget, and the enthusiastic and herculean labors of the indefatigable Secretary-General, Mr. McCormac. Many and varied are the details necessary to be attended to in order to bring together so many scientific and practical physicians and surgeons from all parts of the world, and provide both for their entertainment and instruction. The successful manner in which this was accomplished showed that neither energy nor skill was wanting in those who had in charge the arrangement of the programme. The meeting could not fail to be of immense benefit to those who were fortunate enough to be present. The attrition of mind with mind, the quickening of the intelligence, the suggestion of new lines of thought, the increase of practical experience, and the convergence and interchange of ideas, are among some of the grand results which may be expected to flow from such a gathering as this. It may also prove a useful remedy against that hindrance to scientific progress, and professional advancement so prevalent in our midst, that canker-worm—self-sufficiency.

THE CANADA MEDICAL ASSOCIATION.

The fourteenth annual meeting of the Canada Medical Association was held in Halifax, commencing on the third of August, under the presidency of Dr. Canniff. The attendance was not as large as usual, but the meeting was, nevertheless, a very interesting and profitable one. The address of the President on the old subject of "Professional Ethics," (though we fear new to many members of our profession), was most opportune, for at no time in the history of the profession in Canada has there been greater need of iteration and advice on this important topic than at present. It would almost seem as if some of our medical brethren were either entirely ignorant of the provisions of the Code of Ethics, or had said good-bye to all such time-honored counsels, in their mad haste for professional fame, or world-wide notoriety. Our only regret is that the worthy President had not as audience those members who most required the lessons so eloquently expressed. We trust, however, that some of those absent ones may read it in the columns of the *Lancet*, and take counsel of it in their conduct towards their brethren.

Many of the papers read, both medical and surgical, were of more than ordinary merit, and elicited considerable discussion in which many of the members took an active part. The general interest in the meeting was much enhanced by the fact that the papers were read in the same hall, there being no divisions into sections as is usually done.

Sanitary matters as usual came in for a full share of attention, and the committee reported that very vigorous efforts were made during the course of the last session of the Dominion Parliament to prevail upon the Government to create a bureau of health and vital statistics. On two occasions the committee by appointment waited upon Sir Charles Tupper and Sir John Macdonald to urge the importance of sanitary matters and endeavour to secure a grant for the purpose of carrying out an effective system of health registration in accordance with the spirit of the resolution adopted by the Association. The committee was accompanied by almost all the members of the medical profession belonging to the Senate and House of Commons, as well as the profession of Ottawa.

As might be expected, Sir Charles Tupper expressed his desire to carry out the wishes of the Association. Sir John Macdonald expressed himself as strongly in favour of taking some decisive step in the near future to establish a bureau of vital statistics, and to create a department devoted to public hygiene. In fact, he gave the committee to understand that at the close of the session he would move in the matter, or, at least, as soon as the census taking was completed. Not only did members of Parliament manifest an interest in the matter, but the press throughout the Dominion very generally advocated prompt action. The members of the committee in their individual capacity lost no opportunity in urging the subject upon the Government and members of Parliament, and in their efforts they were warmly seconded by the medical gentlemen in the House.

The social side of the meeting was all that could be desired, and was in keeping with the well known hospitality of our brethren in the Maritime Provinces. The sail around the beautiful harbour of Halifax was most delightful, and much enjoyed by those who participated in it.

PROFESSIONAL ETHICS.

To read our local papers it would appear as if some members of the profession were strongly unmindful of what they owe to themselves and to their brethren at large. It is generally recognized by all really reputable practitioners that anything like a parade of cases and of treatment before the public is beneath the true dignity which should be maintained, and degrades those who indulge therein to a level with quackery. We have often been disgusted as we have read the different country journals at announcements that Mr. so-and-so scratched his finger, but, under the skilful treatment of Dr. ——, he is rapidly recovering. We have charitably attributed many such notices to the officious zeal of some item-searcher, and would fain exonerate the professional gentleman from any share in the notice, knowing well that such a flaunting of name and "skill" would not meet with the approval of any really honorable member of our profession. One of the latest of these disgusting exhibitions occurred in connection with an accident which befel a little girl in the County of Victoria, Ont. She was kicked in the head by a horse, causing severe fracture of the skull. Dr. A. was called in and gave her such treatment as he considered adapted to her case. Twenty hours afterwards Dr. B. was sent for and immediately took charge of the case. The patient rallied, and in a few days, an operation for the removal of the protusion of a portion of the brain was performed. "This successful and skilful operation" was published in a local paper, and was worded in such a way as to reflect discredit upon the skill of Dr. A., while it was most laudatory of the surgical treatment of Dr. B. who had rescued the child from certain death. Unfortunately, however, for this grand flourish of trumpets, the patient died. We have before us the whole of a somewhat unseemly correspondence that ensued, in which different practitioners participated. It affords another example of the many attempts at display, with some degree of success, before the minds of those altogether unable to judge of the real character of a course adopted, but which to such appears to be wonderfully in advance of all they had ever heard.

Some there are again, on the other hand, who are constantly parading themselves in the public newspapers, availing themselves of any pretext to write a letter to the press, with the view of bringing themselves into prominence, and keeping their names before the public. The name of an individual who resides not many miles east of Toronto occurs to us while we write. This gentleman, who is scarcely ever known to write an article, paragraph or letter to any of the medical journals, for the benefit of his *confreres*, is ever ready, on all conceivable topics, to air his views before the general public in the secular press.

We do hope that the progressing intelligence of the community will soon mark its appreciation of such lines of procedure, but until it does there will, we fear, be those found who having even a degree and a license, will stoop, however low, in the vain hope of obtaining public favor.

To vaccinate or not, that is the question;
Whether 'tis better for man to suffer
The painful pangs and lasting scars of small-pox,
Or to bare arms before the surgeon's lancet,
And, by being vaccinated, end them. Yes!
To feel the tiny point and say we end
The chance of many a thousand awful scars
That flesh is heir to,—'tis a consummation
Devoutedly to be wished.—Ah! soft you now,
The vaccinator! Sir, upon thy rounds
Be my poor arm remembered! *Punch.*

HON. DR. WM. H. BROUSE.

It is with the most profound regret that we this month announce the death of the Hon. Dr. Brouse, of Ottawa. In his death the medical profession and the country sustain an irreparable loss. He was a descendant of the U. E. Loyalists, and was born in the Co. of Dundas. He received his literary training in the University of Victoria College, from which he obtained the degree of M.A. in 1848. His professional education, however, was received partly in Victoria College and partly in McGill College, Montreal, in the latter of which he finally took his degree. He subsequently settled in Prescott, and commenced the practice of his profession, in which he was eminently successful, and soon acquired more than a local reputation. He continued his practice there until about a year ago, when he removed to Ottawa, where he had already secured an extensive and lucrative practice. In 1866 he was elected to represent the St. Lawrence and Eastern Division in the Ontario Medical Council, and continued as the representative from that date until the last election, when Dr. Bergin succeeded him, and he was chosen the representative of Victoria College. He also held the position of President of the Council from 1870 to '71. For many years past he was connected with the militia as surgeon to the 56th Volunteer Battalion. He was mayor of Prescott in 1866, the year of the Fenian raid into Canada. When the Fenian forces arrived at Ogdensburg with the intention of crossing the river, the mayor of that city telegraphed the mayor of Prescott, asking what he could do to assist the Canadian authorities. Dr. Brouse immediately sent the following laconic reply: "Let them come over, but don't let them go back."

Dr. Brouse first entered Parliament in 1872, as the representative of South Grenville. He was re-elected in 1874, and in 1878 was appointed a Senator. During his Parliamentary career he distinguished himself by securing a pension for the surviving heroes of 1812-15, and also by his laudable efforts to obtain some recognition of the faithful services of those who had acted a patriotic part in the rebellion of 1837. He took a warm interest in everything that was calculated to promote the welfare of the people morally or physically. During the last session of Parliament he delivered a most able and interesting speech in the Senate, on the question of Public Health and Sanitary Reform, showing by carefully compiled statistics the great saving of life that might be effected by wise legislation, and was highly complimented by leading members on the efforts he had put forth on this great question, and the favourable impression he had made on the House. He will be greatly missed in the Senate and among his many warm friends, for he was much respected and esteemed by all who knew him. He leaves a wife and two children to mourn his loss.

PRESIDENT GARFIELD.—The condition of President Garfield has been much improved in some respects during the past week, but it is still far from assuring. The stomach is doing its work with more energy, and the enemata have been discontinued again. His physicians are more hopeful, although there does not appear to our minds to be much solid ground to found hope upon. The suppuration of the parotid gland is most significant of a serious state of affairs, and the long-continued suppuration from the wound shows most unmistakably that the ball has not, as was hoped, become encysted, but by its presence is a source of constant irritation, and is keeping up a continued discharge. Everything is being done for the patient that can be done. Every confidence is very justly reposed in his medical advisers, and, come what may, there can be no cause for blame attached to them. The safe removal of the ball, owing to depth and the uncertainty of its precise locality, is, no doubt, an impossibility, or it would have been accomplished long ere this. His weakness and emaciation; his long-continued high temperature; the constant drain upon the system, and, above all, the tangible evidence of blood-poisoning, all point towards a fatal termination, sooner or later. We would fain hope for the best, but we fear the worst.

LIABILITY OF PHYSICIANS.—A rather curious case has been recently decided by the Supreme Court of Michigan. A doctor being called to attend an accouchement, took with him a person who was not a physician, to act as assistant. The husband having subsequently discovered that the as-

sistant was not a medical man, brought an action for damages against the doctor. The complaint was, that the physician had brought as his assistant without disclosing his character, one who was not a professional man. It was not shown that the doctor had represented him as a physician, or that there had been any lack of skill on the part of the former or misbehaviour on the part of the latter, or that either husband or wife had objected to his presence, in fact they had consented. The jury gave a verdict for the plaintiff, and upon the case being appealed to the Supreme Court to test the question of the physician's liability, the judgment was affirmed by that tribunal. In rendering judgment the court declared that "it would be shocking to our sense of right, justice and propriety to doubt even that for such an act the law would afford an ample remedy. To the plaintiff the case was a most sacred one, and no one had a right to intrude unless invited or because of some real and pressing necessity, which it is not pretended existed in this case."

Jamaica as a Winter Residence.—As a winter residence for persons suffering from lung affections, the Island of Jamaica has many advantages. Dr. J. J. Hillary, who formerly practiced in Uxbridge, Ont., in a letter lately received from him says, "the climate cannot be surpassed on this side of the Atlantic." The thermometer never reaches 90° F., nor falls below 75° the year round. He would strongly advise persons troubled with chest affections to try this climate for the winter. Those contemplating a change of climate would do well to correspond with him, before going elsewhere. His address is Annatto Bay, Jamaica.

Appointments.—Dr. John Ferguson has been appointed Assistant Demonstrator of Anatomy in the Toronto School of Medicine. Several of the present occupants of subordinate chairs in the school have also been appointed *adjunct* Lecturers on Surgery, Midwifery, Therapeutics and Anatomy, respectively.

Dr. James Fulton, of St. Thomas, has been appointed surgeon of the United Canada Southern Air-Line Brakemen Association.

Dr. Seivewright, of New Westminster, B.C., has been appointed Medical Officer for the port of Burrard Inlet.

Medical Council of New Brunswick.—The Medical Council of the Province of New Brunswick was formally inaugurated on the 19th of July. The following are the names of the members, of whom the first five mentioned were appointed by the New Brunswick Medical Society, and the last four by the Governor-in-Council: Drs. McLaren, Hamilton, and Travers, of St. John; A. B. Atherton of Fredericton, and Vail of Sussex; Drs. Bayard, Preston (Homœpathist), of St. John; Brown of Fredericton, and A. C. Smith of Newcastle. Dr. Bayard, of St. John, was appointed President; Dr. Currie, of Fredericton, Registrar and Secretary of the Council, and Dr. Hamilton, Treasurer.

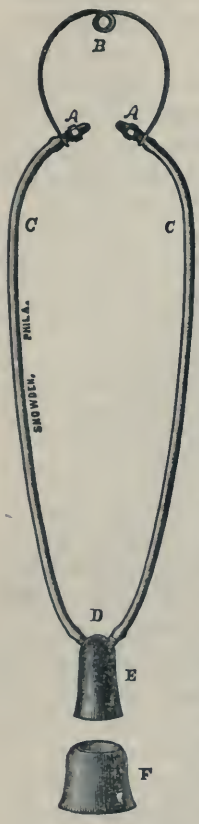
Royal College of Surgeons of England.—Drs. H. A. DeLom and W. F. Chappell, of Trinity Medical College, Toronto, successfully passed the required examination for the diploma, and were admitted members in July last. Dr. Thomas R. Dupuis, of Kingston, also successfully passed the same examination, and was admitted to membership.

Medical M.P.P.'s.—Dr. Kincaid, of Peterboro', has been elected, by the concurrence of both political parties, to represent West Peterboro' in the Local Legislature. Dr. D. H. Wilson, of Nelsonville, has been elected member of Parliament for North Dufferin, Manitoba.

Bathurst and Rideau Medical Association.—The following officers have been elected for the ensuing year:—President, Dr. Cranston; 1st Vice do., Dr. Lafferty; 2nd do., Dr. Baird; Secretary, Dr. Bentley; Treasurer, Dr. Hill.

Matriculates in Medicine, Toronto University.—The following gentlemen recently passed the matriculation examination in the faculty of medicine:—H. Bascombe, E. Bourke, F. W. Cane, W. McK. Dougall, A. S. Draper, W. N. Goodall, W. H. Murray, D. M. Stabler.

Coroners.—Thomas Norton, M.D., of Horning's Mills; Joseph Carbert, M.D., and James Henry, M.D., of Orangeville; Robert Lawrence, of Mono Mills, and Thomas Turnbull, of Mono Centre, have been appointed Coroners for the Co. of Dufferin, Ont.



Price $3.

NEW STETHOSCOPE.—We give herewith a cut of a stethoscope recently devised by W. Snowden of Philadelphia :—

The advantages claimed for this instrument are its simplicity of construction, superior acoustic properties, and ready adaptability to all positions of both patient and physician. It is composed of a hard wood bell (E), with a soft rubber cup (F), two flexible rubber tubes (CC), attached to the upper portion of the bell by two perforated nipples at (D), two ear pieces (AA), of hard wood covered with soft rubber pads, the whole completed by a wire spring (B), so arranged as to retain the ear pieces firmly in position when in use. We have had one in use for a short time, and are much pleased with it.

Books and Pamphlets.

LECTURES ON DISEASES OF THE NERVOUS SYSTEM, ESPECIALLY IN WOMEN. By S. Weir Mitchell, M.D., Philadelphia, 1881 : Henry C. Lea's, Son & Co. Toronto : Willing & Williamson.

This little octavo of 233 pages, presents, in thirteen compressed lectures, an amount of clear practical instruction, on one of the most bewildering departments of medicine, which the patient reader might often in vain seek for in books of tenfold its bulk. On every page the author has contrived to introduce attractive and instructive facts, and lucid observations, which at once attest his mastery of the subject, and command the studious attention of the thoughtful reader. As illustrative of the peculiar merits of Dr. Mitchell's little book, we believe we cannot do better than to quote here a few passages which have seemed to us indicative of sound practical knowledge and matured reflection. Speaking of the treatment of "those difficult combinations of hysteria with defective nutrition, which are often too much for the best of us," Dr. Mitchell thus summarily disposes of the quondam accredited therapeutics of the malady.

"I have some belief in the occasional value of induction currents in hystero-palsies, but, as to the direct good to be had out of the drugs on which men once relied in the treatment of this disease, I have said nothing, because, except to condemn, I had nothing to say, and because I believe that the numberless remedies for hysteria, to be found in the books, will be swept by another generation into the limbo provided for drugs with decayed reputations ; but in thus expressing myself I do not mean to say that no drugs have an indirect value."

In his 4th lecture, on "*Mimicry of disease*," we light upon the following little gem, in connection with a most dramatic case of precocious neurosis in a girl of thirteen :—"My patient, when first seen by me, had been abandoned by two homœopathic physicians, who had left for her use a prescription of *rather ample doses of morphia*." No doubt, had this girl died soon after being deserted by the brace of infinitesimals, they would have held that she had fallen a victim to allopathy.

On pages 101, 102, 107, 125, 135, 149, 150, 155, Dr. Mitchell details some very instructive cases of formidable nervous diseases, induced by over-work of brain, which might very profitably be studied by some of our educational authorities. If the present system of "intermediate examinations" fail to bring forth a rich crop of life-long neuroses and fatal organic diseases, then may we believe that the laws of nature are not unchangeable.

The following passages found in Dr. Mitchell's concluding lecture, we may leave to speak both for themselves and their author :—"Nothing, I think, can be more melancholy than an honest survey of the amount of good done in hysteria by the host of drugs which go to form the so-called therapeutics of the disease. In disorders where time is valuable, we may find a happy resource in the famous class of anti-spasmodics, but as a rule they are swiftly disappearing from the apothecary's prescription files, and the physician of our day who is called upon to treat hysteria, or general nervous-

ness or neurasthænia, wisely contents himself with a careful estimate of causes, and an effort to deal with these by patient treatment."

"The treatment to which in these pages I so many times refer, consists in an effort to lift the health of patients to a higher plane by the use of seclusion, which cuts off excitement and foolish sympathy; by rest, so complete as to exclude all causes of tire; by massage, which substitutes passive exercise for exertion; and by electrical muscular excitation, which acts in a somewhat similar manner to massage, and with it, by depriving rest in bed of its essential evils, leaves only its good."

"I do not say that seclusion is impossible in the home of the invalid, for I have obtained it with success many times, when my nurse was a thoroughly good one; but the other plan of securing it by a change of dwelling is better and far easier. Seclusion, of course, has for its objects the cutting off of many hurtful influences; but above all, it means the power of separating the invalid from some willing slave, a mother or a sister, whose serfdom, as usual, degrades and destroys the despot, while it ruins the slave." * * * * *

"If the patient and nurse do not agree, make a change, and if need be another."

Note.—If the physician changes nurses as often as a capricious or mendacious hysterique chooses to manufacture a quarrel, he may prepare himself for wondrous evolutions before realising *the survival of the fittest.*

"I cannot enough emphasize this matter of the nurse. Put yourself in the place of an intelligent lady shut up for two months with a coarse woman, whose talk and whose habits disgust, and doubly disgust, because the victim is emotional and sensitive by nature and by habit, and you will realise the need for care in your choice of an attendant. *Mere technical training will not answer, and I have seen an utterly untrained woman, of good brains and tact, win successes which are sometimes denied to the best educated nurses who lacked these ever-needed moral qualities which no training and no length of experience will give to some women.*"

The italics of the preceding lines, as well as some others preceding, are not those of the author. We have taken the liberty of so marking his words because of their great force and value. A so-called *trained nurse*, who lacks those indispensable qualities of head and heart, which no training can impart, but on the contrary, which become substituted by overweaning self-conceit, disgusting arrogance, incorrigible insubordination or extemporised sycophancy, is, we are convinced, the greatest curse that can alight on either an earnest physician or his afflicted patient.

TREATISE ON DISEASES OF THE JOINTS. By Richard Barwell, F.R.C.S. Second Edition. New York: William Wood & Co. Toronto: Willing & Williamson.

The thanks of the profession are due to Messrs. Wood & Co. for the admirable series of most valuable works they have for the last three years furnished the members—at a cost so trifling as to be accessible to all—in their Library of Standard Medical Authors. Prominent among their selections will stand this most excellent and exhaustive treatise on Diseases of the Joints by this eminent writer on this subject, Mr. Barwell. Our space will not permit the detailing of the author's exhaustive physiological and pathological anatomy contained in the first chapter of the volume, but there are many other points of great interest in the succeeding chapters to which we will make brief allusion. If we mistake not, Velpeau, in 1843, was the first to announce the success he had experienced in the puncture and subsequent injection of a solution of iodine in cases of acute synovitis. Mr. Barwell adopts freely the former by means of the aspirator, but is significantly silent on the heroic treatment involved in the latter. The fifth chapter, on Strumous Synovitis, contains many valuable suggestions. In the first stage the essentials of treatment are to be recognized in first, good position; second, total and entire rest; firm compression of joint; iodine application externally, and in this form, injection into the diseased tissues of iodized solutions (3ss. of tincture of iodine to 3vii. of water. In the fourteenth chapter, on Diseases of the Hip Joint, Mr. B. mentions the singular fact that nearly all the boys admitted for Hip Joint Disease into the Charing Cross Hospital had phymosis, and that in a large proportion of girls affected with the same disease, vulvitis and vaginitis, with or without discharge existed. Further, that in hospitals fot the Jews, few cases of hip disease are to be found, and that most of those received belong not to the Jewish but to the

Christian community. Mr. B. accounts for this by the fact that phimosed children have facile frequent and long continued priapism; that this condition after a time produces a certain irritability of the lumbar spinal cord. That the influences of spinal irritation on the trophic nerves are well-known, and that just at that particular period large trophic changes are in process about the hip joint. Chapter xviii. contains valuable information on the restoration of crippled joints; chapter xix. on operations for deformities of the knee; and chapter xx. is an admirable treatise on the removal of diseased joints. The style in which this work is written is lucid and forcible, and the practical ideas conveyed cannot fail to make the reader rise from its perusal with increased respect for the author.

Refraction of the Eye, its Diagnosis and the Correction of its Errors. By A. Stanford Morton, M.B., Senior Assistant Surgeon Royal South London Ophthalmic Hospital.

We have just received this excellent little volume, written by Dr. Morton. It is principally intended for students and practitioners beginning the study of refraction, being concise, well-arranged and remarkably clear in its definitions. Dr. Morton has mananged to put all the leading facts in a small compass, without rendering them unintelligible, as is too often the case. We cordially recommend the work.

A Medical Formulary, based on U. States and British Pharmacopœias. New York: William Wood & Co. Toronto: Willing & Williamson.

In this work the less important of the drugs and preparations of the Pharmacopœia are omitted. It will be found useful for students preparing for examination.

Uniao Medica—Publicacao Mensal. The Medical Union. A monthly publication in the Portuguese language; edited by Drs. C. de Fraitus, J. de Mosera, Moncorvo, Mousa Brazil and Silvia Aranje, in Rio de Janiero, Brazil.

We beg to acknowledge the receipt of the first six nnmbers, from January to June inclusive, of the above new journal, which we hail as a very promising accession to the medical literature of America. The scientific merit of the contributions, enhanced as it is by the clear and correct typography, and the superior quality of the paper, can not fail to secure to the talented and spirited *Redactores* and publishers a fair share, even in the indolent empire of Brazil, of professional sympathy and support. The lecture of *Professor V. Saboia*, in the January number, on *Benign Fungus of the Testicle*, is replete with valuable instruction, and affords a very gratifying illustration of the elevated position to which surgical science has been raised by our southern continental confreres. We might extend our approbatory remarks on several other articles, did our present available space permit the indulgence. In future issues of the *Lancet*, we may avail of translations from the pages of *Uniao*, which may appear to us deserving of reproduction, suited to the requirements of our readers.

The Popular Science Monthly. D. Appleton & Co., New York.

The August No. of this periodical is a rich one. The first article is a lecture by *Prof Huxley* on the *Herring*. It abounds with interesting and highly instructive facts. The second article, by *Felix Oswald, M.D.*, on *Physical Education—Recreation*, is characterized by the wonted force and boldness of this writer. It is, we fear, rather too heterdox to command the approval of any large proportion of the reading community, and may therefore fail to benefit those who stand most in need of improvement. *School-Room Ventilation*, by *Dr. F. Higgins*, should be earnestly perused by all interested in the education of the rising generation. Not only should its contents command the attention of all teachers and inspectors of schools, but also of all parents and guardians. *Intelligence of Ants*, by *George J. Romaines*, is a truly pleasing brochure, which will well repay the lover of natural history. "Go to the ant, thou sluggard, consider her ways, and learn wisdom!" Go to *G. J. Romaines'* ants, all who love to contemplate the wonders and wisdom of creation, and you will find your own intelligence much improved by your study of the social polity and the industrial regulations of these tiny active creatures.

Births, Marriages and Deaths.

At Mildmay, Ont., on the 22nd of July, Neil Fleming, M.D., aged 42 years.

In Ottawa, on the 23rd ult., Hon. Dr. Brouse, in the 57th year of his age.

At Thornbury, Ont., on the 22nd ult., Henry Parsley, M.D., M.C.R.S., Eng., aged 73 years.

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Original Communications.

TREATMENT OF SCARLATINA MALIGNA BY THE USE OF COLD WATER AND ICE.

BY A. WORTHINGTON, M.D., IROQUOIS, ONT.

(Read before the Canada Medical Association at Halifax, N.S., August 3rd, 1881.)

MR. PRESIDENT AND GENTLEMEN,—The purpose of this paper is to place before you my brief experience in the treatment of Scarlatina Maligna by the use of cold water and ice, which I was induced to adopt in 1855, and since then have continued and still continue to use. Should the interests of the profession be benefited by my experience my object will be attained.

Scarlet fever is a disease always to be dreaded by the physician, as no calculation can be made when he may not meet a malignant case, even in the milder forms of the epidemic. It exhibits some striking peculiarities. The onset may be sudden and violent, destroying life in as short a time as does cerebro-spinal meningitis; or a case may run a violent course without the slightest appearance of the characteristic eruption; or a very mild attack, without the eruption, may be followed during desquamation by acute disease of the kidneys. The throat may be attacked in the most violent manner without eruption and the patient continue conscious throughout the attack. Patches of fibrinous exudation may appear upon the fauces, and rapid suppuration of the submucous tissue of the pharynx may occur, not unlike the sudden formation of pus in the severer forms of erysipelas; or the brain may first become involved, the poison rapidly assuming control, the normal cerebral functions ceases to be performed, and the patient lies in a muttering delirium, gradually deepening into coma, and if the malady remains unchecked, death speedily puts an end to the scene. The peculiar features mentioned fell under my observation during the extensive and terrible epidemic of 1855-6, which prevailed in the County of Dundas, Ont. My first case occurred in the summer of 1852, the patient being a bright girl of three years. She was apparently asleep when I arrived. Her pulse was rapid; skin hot and breathing hurried. Her head seemed to be very hot. (No thermometers in use then.) In a few minutes she went into a violent convulsion, became comatose, and died that evening. A purplish rash was seen under the cuticle. The attack in this case was so overwhelming that I could do nothing. A few milder cases occurred, and I made use of the remedies recommended in our text-books, and succeeded in losing about one in three cases, or 33 per cent. The disastrous results of my efforts made such an impression upon me, that I decided not to attend scarlet fever patients, if I could avoid it, unless I could find some successful mode of treatment. During the following year, when looking up the literature of scarlatina, I came upon a small work on children, by J. F. Meigs, of Philadelphia, in which I found a letter to the author giving the history of a number of cases treated by cold sponging, ice to the throat, externally and internally, and ice-water poured over the head and body, nearly all of which recovered. This letter was written at the request of the author by Dr. Hiram Corsen, of Pennsylvania, in which he credits the origin of the cold water treatment to Dr. Samuel Jackson, whose articles on the subject appeared in the *American Journal of Medical Sciences* for May and August, 1847. The perusal of this letter fully decided me to make a fair trial of the cold treatment as soon as occasion should offer, or, in case of decided objection to cold, not to treat the case. I had but a short time to wait, as in the spring of 1855 the epidemic mentioned broke out and proved to be very malignant and extensive. It visited most of the families within my circle, and became a perfect terror to parents. I was called first to a family in the village of Iroquois, in which there were five children down with scarlet fever. I at once told the parents my convictions as to treatment, and obtained liberty to do as I pleased. The cases were severe, but not malignant. I had cloths wrung out of cold water and kept constantly about their necks, and cold water

poured over their heads, and their bodies and limbs sponged with cool water as often as needed to control the intense heat and prevent too much swelling of the neck. They all recovered, without any of the usual consequences, in about eight to ten days. The results noted in these cases were that the acute stage lasted about five days, and convalescence was very rapid after that. For nearly a year I was constantly in attendance on scarlet fever patients. Some amusing instances of prejudice to the use of cold water occurred. I was called about seven miles to a family, and found the mother with her face buried in her hands and resting on the table, sobbing bitterly. I asked her what the great trouble was, to which she replied that all the children had scarlet fever and were going to die. I replied that I thought they could be saved. She said you will not use any cold water, of course. I replied that if she did not wish any cold water used I did not wish to attend, as I could not ensure a favorable result. She gave a very reluctant consent, and, on looking around, I found all the children (nine) down with scarlet fever, three of whom (boys) were delirious, and had been for several hours. I directed large dishes to be placed at the bed of each, and a pail of cold water to be brought in. I filled a small pitcher and began pouring water on the head of one of the boys, but the mother, who had been watching my movements, placed her hand on his head to intercept the stream, moving her hand as I moved the pitcher. She soon grew tired and I had my own way. After about two hours of constant work, going from one to the other and using the water freely, both on their heads and necks, I succeeded in restoring reason. I had now the full confidence of the parents. Two faithful attendants were procured, and I gave them strict orders not to leave them under any circumstances, and to pour water on their heads, as needed to prevent delirium, and to put thick cloths wrung out of cold water around their necks, and to change them every few minutes to control the swelling, and, if necessary, to pour the water on their necks for a few minutes at a time, should the swelling appear to increase. I may say here that in many instances the glands of the neck gave the first indication of the attack, and, if not interfered with, would in a few hours become so much swollen as to impede and finally to prevent deglutition and seriously interfere with respiration. The pharynx, soft palate and tonsils, became intensely congested, and in the severest cases the color was quite purple. Patches of a dirty white color appeared on the soft palate and tonsils, and were not removable, and when the throat was first attacked it was decidedly the worst feature of the case, and, if permitted to run for 36 to 48 hours without check, could rarely be controlled, and was usually followed by delirium, coma and death. I returned the next morning to find that my instructions had been fully carried out, and my patients not only no worse, but were holding well up against the influence of the poison.

I gave only some compound jalap powder to move the bowels. My nine patients all recovered without any bad sequelæ. A peculiar feature in the oldest boy's case, and which I never saw in any other was, that desquamation of the entire mucous surface of the tongue took place in the form of blisters of the size of a five cent piece. He was in great misery for a week, but, with the use of cold and emollient applications, he was soon better. I may here remark that the few cases which took an adynamic form and in which the rash was seen of a dark red or purple color, always improved on reducing the temperature; the rash changing to a bright red and coming out fully to the surface. The application of cold to the entire surface caused the rash to disappear, if long continued; but it always returned with increasing temperature and improved in appearance, nor, as I at first apprehended, was there any danger from metastasis. Very soon after, I was called to see an only son, aged 17, who had been brought down so suddenly and violently that his mother was in great distress when I arrived. The rapidity and violence of the attack alarmed me, as I had not seen any recover with a similar attack under the usual form of treatment. His mother at once asked me what the disease was and if I could save him. I told her that it was probably a very bad attack of scarlet fever, but that I thought I could get him through. She said, "You won't use cold water, will you?" I replied as in the other cases, that I would rather not take charge of the case, and prepared to leave, when she decided to place him under my control. The attack commenced early in the afternoon of this day, and his condition was (9 p.m.) as follows: Pulse 120, very hot; respiration hurried; was delirious and restless, and

could not be roused. I had a pail of the coldest water that could be brought in, and while two assistants held his head clear of the bed, I poured the water gently all over it for nearly an hour, when he could be roused, and with a little further application he became quite himself. I directed the nurse, in anticipation of the throat difficulty, to apply thick cloths wrung out of the coldest water and frequently changed; but, after all the precautions, I had to remove the cloths and pour the water over his neck for some time and repeat the process from time to time to keep the swelling under control. The rash appeared during the night. I found on remitting the applications for even a short time the rash became abundant, the skin intensely hot, and the delirium returned. (He had no medicine, except to move his bowels as needed.) The constant application of cold water, more especially to the neck and head, was continued through the first four days and nights of the attack, the crisis usually taking place on the fifth day, which proved true in this case. He was able to be up on the seventh day and required but little more attendance. Several cases came under my care where I could not inspire confidence in the cold treatment, and in every such case the disease either ran a lengthened course and the patient finally succumbed, or convalesced slowly with the loss or impairment of hearing, smell, or the destruction of a portion of the soft palate and nasal mucous lining. During the prevalence of this epidemic two rather remarkable cases occurred. A. H., aged 19, requested me to examine her throat, in which there was a heightened color of the tonsils, but no swelling. I told her she was threatened with quinsy, gave a diaphoretic and desired her to leave school for a few days, and when home to apply a cold wet cloth to her throat. I was sent for in the afternoon and found her complaining of her throat very much, but could see only increased redness and a fulness of the soft palate. Pulse 100 and some fever, but nothing serious indicated. Sent for again about 9 p.m. same evening, and found all the parts within much congested, having a purplish-red appearance and considerably swollen. Externally, the neck, especially in the region of the parotid and sub-maxillary glands, was becoming enlarged. Pulse 130; skin very hot, and breathing hurried with great restlessness. Her mind remained clear throughout. I told the parents that there could be no doubt but it was malignant scarlatina, and that there was but one way to save her, and that was to apply cold in the most constant and energetic manner. Cloths were wrung out of the coldest water and put around the neck and changed every few minutes, and the water poured on occasionally to ensure a constant degree of cold. Her mouth and throat were frequently gargled with cold water, as ice could not be had. This gave great relief. No medicines or nourishment could be given, as she could swallow nothing. Second day—I had little hopes of my patient, but directed them not to intermit the treatment in the least. No fibrinous patches were to be seen, nor was there any appearance of rash throughout. Pulse same as yesterday and temperature very high. She was still conscious, but inclined to drowsiness and stupor. Third day—Patient much the same as yesterday; but there is a feeling of great fulness in the throat and sense of suffocation. Pulse 134; very compressible and temperature very high; extremities inclined to be cool. She is greatly prostrated,—cannot swallow the least thing. Between my visits this day an abscess in the throat broke and discharged several ounces of pus and blood, nearly suffocating the patient. I found my patient in the evening more calm and breathing more easily. Pulse 120 and throat looking better. The tongue, as in every case, was intensely red. I directed a continuance of the treatment sufficient to control the fever, and to give milk as soon as she could take it. Fourth day—Much improved this morning—took some milk during the night—ordered chicken broth, and to keep the cold still to the throat. Fifth day—Patient rapidly convalescing. I had no further trouble, and at the end of three weeks she was again teaching. Case 2.—On the fifth day of the first case, her sister suffered an attack of the same character, and, if possible, more severe. It ran the same course and terminated in recovery in about the same time. The treatment was carried out with the same energy and perseverance as in case 1, and being earlier commenced, there was no suppuration—no appearance of rash, and desquamation followed in each case. Convalescence was equally rapid as in the first case. Was the disease communicated from 1st to 2nd

case? Was it scarlatina maligna? Two mild cases came under my notice with no appearance of rash, one of which was followed by dropsy. W. B., aged 40, sent for me during the night. I found him very uneasy and considerably alarmed about the swelling of his feet, legs and face, which had suddenly appeared. I declined doing anything, and said he should at once send for his regular medical attendant. He said he could not do so till morning, and he must have something to relieve his distress, and asked what his disease was. I replied that he had had scarlet fever, and dropsy had followed from exposure. Most of his family were sick with scarlet fever at this time. He said he had not been sick, but the doctor had given him some medicine for his appetite, but he knew he had not had scarlet fever. I gave him a strong purgative and left. The next day I received a note from his doctor, saying he could not attend and asking me to take charge of the case. He recovered under treatment for dropsy. The second case was my sister, who was attacked with all the usual symptoms of scarlet fever, which terminated in the usual manner, followed by desquamation, but there was never the slightest appearance of the characteristic eruption.

An epidemic of scarlatina occurred in 1863 in the northern part of Huron County, which proved fatal in a number of cases, where my former experience had led me to think they ought to have been saved by the cold water treatment, and I confess to considerable disappointment at my want of success, though on the whole the cold treatment was successful. There was a difference in a remarkable way in the character of the epidemics of 1855 and 1863. That of 1855, in most of the malignant cases, attacked the brain, and through it the nervous system, producing a tendency to death by coma, and indicating such a form of treatment as would relieve the brain from the overwhelming effects of the poison. This was most effectually found in the cold water treatment, very little support being needed; while in the epidemic of 1863 the heart seemed to be the point of attack, causing great debility and prostration, producing a tendency to death by asthenia, indicating the necessity of tonics and stimulants from the first, as also strong nutrition and moderate application of cold, more especially to the throat. The mind in the last mentioned epidemic usually remained clear, and I have reason to think that if I had commenced the use of tonics and stimulants earlier I would have saved several patients who ultimately succumbed.

ON WATER ANALYSIS.

BY J. W. MACDONALD, M.D., EDIN., L.R.C.S.E.,
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OF CANADA, LONDONDERRY, N.S.

(Read before the Canada Medical Association, Aug. 4, 1881).

I am frequently asked by both medical men and laymen to give some ready methods by which the fitness or unfitness of water for domestic purposes can be ascertained. In answering the question several difficulties present themselves. The cost of apparatus for a complete examination of water is a serious matter; few persons have the time or the inclination to carry out detailed chemical analyses, and, lastly, a conclusion as to the purity or impurity of water must be based upon a collation of all the evidence that can be obtained, rather than from the results of one or two tests. The vital importance of the subject, and the lively interest which is being awakened in regard to it, have led me to attempt the description of water analysis which will be sufficient for ordinary purposes, and at the same time fall within the means and the opportunities of every medical practitioner. Two years ago I imported from Savory & Moore, of London, one of Parke's Cabinets for water analysis. It cost me, inclusive of duty, about one hundred and fifty dollars, and nearly one-half of the contents was destroyed by breakage. As few would feel disposed to go to that expense, I have endeavored to meet the difficulty by preparing a small, cheap, and at the same time efficient case of chemicals and apparatus, which should not cost more than $12 or $14. The case is 18 inches long, 5 inches wide, and 9 inches high. It contains the following chemicals in three-ounce bottles:

Standard solution of nitrate of silver, solution of yellow chromate of potash, solution of soap, solution of nitrate of barium, two shaking bottles for soap test, Nessler's solution, dilute sulphuric acid, sol. of iodide of potassium and starch, oxalate of ammonium, standard sol. of ammonium chloride,

standard sol. of permanganate of potassium. The apparatus consists of 1 flask with ring for boiling, 2 india-rubber caps with two necks, 1 retort stand, 1 burette with clamp, india-rubber tubing, spirit lamp, 5 test tubes, glass rod, glass measure 50 C.C.

In the examination of water the coarser physical characters, such as color, smell, taste and transparency should first be noted. The *color* is best observed by pouring the water into a tall glass vessel and looking down upon it. Perfectly pure water has a bluish tint, and the bottom of the vessel is clearly seen through several feet of water, while some waters are so turbid as to obscure the bottom when only a few inches are looked through. A green color as a rule indicates vegetable impurity, a yellow or brown color (excepting in peat water), animal impurity. *Smell* is best observed by warming, boiling, or distilling the water, when characteristic odors are frequently given off. The evidence derived from an examination of the physical characters is very unreliable. We must, therefore, proceed to an examination of the dissolved solids which gives us the most valuable evidence. The examination is divided into the qualitative and quantitative :

I. *Qualitative.*—The most useful tests are the following :—

Substances sought for.	Re-agents to be used, and Effects.
Reaction	Litmus and turmeric papers—usual red or brown reactions.
Lime	Oxalate of ammonium—white precipitate.
Chlorine	Nit. of silver and dilute nitric acid—white precipitate becoming lead color.
Nitrous acid	Iodide of potassium and starch in solution—a blue color.
Ammonia	Nessler's solution—a yellow color, or yellow-brown precipitate.
Nitric acid	Sol. of sulphate of iron and pure sulphuric acid—olive-colored zone.
Oxidizable matter, including organic matter	Permanganate of potassium—red color disappears.

II. *Quantitative.*

1. *Determination of Chlorine.*—Prepare a solution of nitrate of silver by dissolving 17 grammes in one litre of water. Take 100 C.C. of the water to be examined, place it in a white porcelain dish, add enough solution of yellow chromate of potash to make it just yellow. Then add the nitrate of silver solution from a burette, and stir. A red color is produced which disappears as long as any chlorine is present. Stop when the least red tint is permanent, then read off the number of C.C. of silver nitrate used ; each of these represents 3.55 milligrammes of chlorine. Multiply by 10 to give the amount per litre, and this again by .07 for grains per gallon. Chlorine in water is very suspicious of the presence of the liquid excreta of men or animals. If, in addition, we find nitric and nitrous acids, ammonia and phosphoric acid, the evidence is very strong. Chlorine, however, may be due to strata containing chloride of sodium or calcium. In this case the water is alkaline from sodium carbonate. In some cases the chlorine is due to impregnation from sea water. It is then large in quantity, there is also magnesia and little evidence of organic matter.

2. *Hardness.*—This is estimated by Clarke's soap test, and by it we determine—

1. Total hardness, representing the aggregate earthy salts and free carbonic acid.

2. The removable hardness, or that which disappears on boiling.

3. The permanent hardness which is unaffected by boiling.

By the soap test can also be determined the amount of certain constituents, such as lime, magnesia, sulphuric acid, and free carbonic acid.

Apparatus required for the soap test.—Measure of 50 or 100 C.C. Burette divided into tenths of a cubic centimetre ; two or more stoppered bottles to hold about four ounces. We also require to have the following solutions :

1. *Standard Solution of Barium Nitrate.*—Dissolve .26 grammes of pure barium nitrate in one litre of water, or 18.2 grains to 1 gallon. A concentrated solution of ten times this strength may be made and diluted with 9 parts of water when used.

2. *Solution of Soap.*—Dissolve a piece of soft potash soap of the British Pharmacopœia in equal parts of water and alcohol ; filter and then graduate as follows :

Put 50 C.C. of the standard solution of barium nitrate into the shaking bottle, and add to it slowly the soap solution from the finely graduated burette. After each addition shake vigorously and place the bottle on its side. Continue this until you have a thin beady lather over the whole surface

permanent for five minutes. Read off the amount of soap solution used; if exactly 2.2. C.C. have been taken the solution is correct. If less the soap solution must be diluted with spirit and water. The amount of dilution can be ascertained by a simple rule. Suppose 1.8 C.C. have been used and the whole of the unused soap solution measures 200 C.C., then

$$\text{As } 1.8 : 2.2 :: 200 : x$$
$$x = 244.4 \text{ C.C.}$$

The 200 C.C. must then be diluted with equal parts of spirit and water to 244.4 C.C.

With these solutions, and having all glasses, burette, etc., perfectly clean, for the least quantity of acid would destroy the accuracy of the process, we can proceed as follows:

1. To determine the total hardness of the water: Take 50 C.C. of the water in a stoppered bottle, and add the soap solution from the burette, shaking strongly after each addition until a lather permanent for five minutes spreads over the whole surface without any break. Then read off the number of tenths of soap solution used. From this number subtract 2, as that quantity is necessary to give a lather with 50 C.C. of the purest water. The soap solution which has been used indicates the hardness due to all the ingredients which can act upon it, as a rule, they are lime, magnesian salts, iron, and free carbonic acid. It is usual to express this hardness by degrees of Clark's scale. Though dependant upon various causes it is considered as so much calcium carbonate per gallon, one grain of calcium carbonate being one degree of Clark's scale.

The calculation is as follows: Each tenth of the soap solution corresponds to .25 milligrammes of calcium carbonate. Multiply this co-efficiently by the number of tenths of soap solution used, and the result is the hardness of 50 C.C. Multiply by 20 for the amount per litre, and by .07 for grains per gallon, or degrees of Clark's scale.

To obtain the permanent hardness.—Boil a known quantity briskly for half an hour, replacing the loss with distilled water from time to time, cork the vessel and allow it to cool. Then determine the hardness in 50 C.C. as before.

Removable hardness.—This is very easily calculated, for we have only to take the difference between the total hardness and the permanent hardness and express the result as removable hardness. The permanent hardness is the most important, for it represents the most objectionable earthy salts, viz.: calcium sulphate and chloride, and the magnesian salts. The permanent hardness of good water should not exceed 3° or 4° of Clark's scale.

The next step in our investigation is the

Determination of free or saline ammonia and of nitrogenous organic matter.—Ammonia in water is chiefly derived from organic substances, either vegetable or animal. In the detection and estimation of ammonia the very delicate test known as Nessler's solution is of the greatest value.

Nessler's Solution is thus prepared: Dissolve 50 grammes of iodide of potassium in 250 C.C. of distilled water; reserve a small quantity, warm the larger portion, and add a strong aqueous solution of corrosive sublimate until the precipitate ceases to disappear, then add the reserved solution of iodide so as to just dissolve the red precipitate; filter and add to the filtrate 200 grammes of solid potash dissolved in boiled water. Dilute to 1 litre and add 5 C.C. of a saturated aqueous solution of mercury bichloride. Allow to subside, decant the clear liquid, and keep in a dark place.

In addition to this solution we require

Standard Solution of Ammonium Chloride, which is of the strength of .0315 grammes to 1 litre of water, each C.C. represents .01 milligrammes of ammonia. The mode of procedure is as follows: Place in a flask 250 C.C. of the water to be examined, distill off about 120 C.C.; measure this distillate carefully, test a little with Nessler's solution in a test tube and observe the color; if not too dark take 100 C.C. of the distillate and put it into a cylindrical glass vessel, and place it upon a piece of white paper. Add to it 1½ C.C. of Nessler. Put into another similar cylinder as many C.C. of ammonium chloride as may be thought necessary and fill up to 100 C.C. of pure distilled water, which has previously been proved to be free from ammonia; drop in 1½ C.C. of Nessler. If the colors correspond the process is finished, and the amount of ammonium chloride used is read off. If the colors are not the same add a little more ammonium chloride so long as no haze shows itself; if it does, then a fresh glass must be taken and another test made. When the colors correspond, read off the C.C. of ammonium used, allow for the portion of distillate not used,

multiply by .01 and we have the number of milligrammes of free ammonia in the 250 C.C. acted upon; multiply this amount by 4 and we have the number of milligrammes per litre. Example—From 250 C.C. of water, 123 were distilled, 100 C.C. were taken for the experiment, 4.5 C.C. of ammonium chloride were required to give the proper color; then $4.5 \times \frac{1}{100} \times .01 \times 4 = 0.2214$ milligrammes of free ammonia per litre. The free ammonia or saline ammonia is the ammonia combined with carbonic, nitric or other acid, and also what may be derived from any easily decomposible substance such as used. The quantity should not exceed .02 milligrammes per litre in good water.

Having calculated the free ammonia, the residue of the water in the retort is used to determine the nitrogenous organic matter as measured by albuminoid ammonia. The nitrogen is converted into ammonia by means of potassium permanganate in presence of an alkali, the ammonia is then distilled off and estimated as above.

Dissolve 8 grammes of permanganate of potassium and 200 grammes of solid caustic potash in 1 litre of water, boil thoroughly to drive off any ammonia and any nitrogenous matter. This is known as Wanklyn's solution. Add to the residue in the retort 25 C.C. of this solution, distil over 110 to 120. Calculate the ammonia as before, and state the results in this case as *albuminoid ammonia*. The standard limit of albuminoid ammonia in good water is stated by Wanklyn to be .05 milligrammes per litre, some other authorities place it at .08. Much albuminoid ammonia, little free ammonia, and almost entire absence of chlorides, is, according to Wanklyn, indicative of vegetable contamination.

OXIDIZABLE MATTER.

The chief sources of oxidizable matter in water are oxidizable organic matter, and nitrous acid as nitrates. The estimation of these affords valuable evidence of the character of water, and they are conveniently determined by means of permanganate of potassium. We calculate 1. *Total oxidizable matter* in terms of oxygen required for its *oxidization*. Make a solution of permanganate by dissolving .395 grammes of the crystallized salt in 1 litre of water. Each C.C. of this solution yields 0.1 milligrammes of oxygen in presence of an acid. Test its accuracy by a solution of crystallized oxalic acid of the strength of .7875 grammes to the litre of water. This solution acidulated with dilute sulphuric acid should exactly decolorize an equal quantity of the solution of permanganate. The process, as recommended by Woods, is as follows:

"Take a convenient quantity of the water to be examined, say 250 C.C., add 5 C.C. of dilute sulphuric acid (1 to 10); drop in the permanganate solution from a burette until a pink color is established; warm the water up to 140°F., dropping in more permanganate if the color disappears; when the temperature reaches 140 remove the lamp, continue to drop in the permanganate till the color is permanent for about ten minutes. Then read off the number of C.C. used, multiply by 0.1 to get the milligrammes of oxygen, and by 4 to get the amount per litre." The amount of oxygen obtained by this process includes that from organic matter and nitrous acid. To separate these we must drive off the nitrous acid by boiling with sulphuric acid as follows:

Take 250 C.C. of the water under examination; add 5 C.C. of dilute sulphuric acid as before; boil briskly for 20 minutes, then allow it to cool down to 140°F., add the permanganate solution until a pink color remains for ten minutes; then calculate as before. The result in this case must be stated as milligrammes per litre of oxidizable organic matter, or organic oxygen.

Nitrous acid is now easily determined, for it is represented by the difference between the two preceding processes. Each milligramme of oxygen is equivalent to 2.875 milligrammes of nitrous acid; the difference must, therefore, be multiplied by this factor, and the result is nitrous acid in milligrammes per litre. From the foregoing tests we can gain sufficient evidence to form an opinion of the character of a given sample of water. The inference from this evidence can be drawn as follows:

A large quantity of nitric and nitrous acids, much oxidizable and nitrogenous organic matter with much chlorine, indicates recent sewage impregnation. With little oxidizable organic matter and nitric acid in large amount, we assume that more or less complete conversion of organic matter has taken place. Albuminoid ammonia and nitric acid in abundance and free ammonia and chlorine in small amount, is indicative of vegetable con

tamination. Little chlorine with much albuminoid and free ammonia, nitrous and nitric acids, show contamination from gaseous emanations.

To those who have not the inclination or the opportunity to carry out an analysis such as I have described, a few ready tests may be useful. Any druggist can prepare from the formulæ already given the following solutions: Nitrate of silver, Nessler's solution, solution of permanganate of potassium, and solution of iodide of potassium and starch. Provided with these they can proceed as follows:

1. Observe the color.

2. Observe the smell, particularly when the water is boiling.

3. The taste.

4. Add to a small quantity of the water in a test tube or wine-glass, a little of the solution of nitrate of silver. If it gives a white color it contains chlorides. This is a very suspicious sign.

5. To another portion of the water add a small quantity of Nessler's solution. A yellow color or yellowish-brown precipitate shows the presence of *ammonia.*

6. Add a few drops of the solution of permanganate of potassium. The pink color remains if the water is pure, it disappears if the water contains organic matter.

These simple tests would, in most cases, settle the question of the purity or impurity of a suspected water. The amount of disease and suffering caused by the use of impure water, is in this country assuming terrible proportions. Epidemics of typhoid and other zymotics are constantly occurring, which could be easily prevented by a little care in examining the waters and discontinuing the use of impure wells. This is one of the evils arising from the want of Public Health legislation. Surely the day is near at hand when the Government will protect the lives of our people from this, as it does from other forms of poisoning, and furnish us with the means whereby we can control the causes of preventable diseases. Then shall we gain a happy victory over those dread enemies which year by year destroy the lives and desolate the homes of so many of the brave sons and daughters of this prosperous Dominion.

NOTE.—For the processes in the qualitative and quantitative analyses, I have drawn freely from the works of Parkes and Wanklyn, to which I refer the reader who wishes to gain familiarity with this very necessary branch of medical study.

CASE OF ADDISON'S DISEASE.

BY E. GOODMAN, M.D., ST. CATHARINES, ONT.

Having recently had an opportunity of witnessing the closing scenes in the life of a patient who has just died from the rare and obscure disease named after Dr. Addison, it has occurred to me that a brief report of the history, symptoms, and *post mortem* appearances might prove interesting to the members of the profession. I have, therefore, decided to communicate to you the salient points of the case for publication:

Robert L——, the victim of the disease, was about 26 years old at the time of his death, which occurred on the 27th of July ult. He was a tinsmith "by trade," of regular habits, sober and industrious. He was neither very robust nor very delicate in appearance; rather thin than otherwise, but not unhealthy looking. For many years before the development of the fatal symptoms he had suffered from obstinate constipation, a condition which very generally accompanies irritation of the sympathetic from disease involving any of the abdominal or pelvic viscera. To relieve this trouble he was in the habit of taking heroic doses of *sulphate* of *magnesia* and other purgatives. Some four or five years ago he purchased from an itinerant vendor of drugs a quack preparation, which he took, and which nearly killed him. It was a drastic "purgative," and produced an attack of enteritis. Under the usual treatment, leeches, opium, fomentations, &c., he recovered, and, so far as I know, did not suffer from any unpleasant sequence in consequence of his indiscretion after the subsidence of the inflammation; unless, indeed, it might have been the cause which ultimately led to the disorganization of the *suprarenal capsules*, by exciting disease in them through disturbance of the circulation, owing to the profound irritation of the sympathetic nerves which constitute so large a portion of the medullary part of the capsules. I lost sight of him after this until the 26th of July, 1881, when I was requested to see him in consultation with the physician in attendance upon him at that time. That gentleman informed me that the case was a very obscure one, and exceedingly difficult to diagnose, and that treatment had very little effect. The patient for the last six months had been failing in strength, and complained of dreadful feelings of prostration, and sinking at the

epigastrium. He said he felt as if he "was going down, down, down." His appetite was craving, almost amounting to bulimia, and yet when he sat down to eat the smell of the viands would so overcome him, that he would frequently faint away and have to be carried out into the open air. For the last six months the skin of his face, neck, and the backs of his hands had a dingy, smoky, lustreless bronze color, more marked at some times than at others, and fading away almost entirely during the last week or two of his illness. At the time of his death the only evidence of the discoloration remaining was on the backs of his hands, and, *possibly*, in the intestinal walls.

Strange to say, just six months ago, and before the symptoms of the disease which led to his death had become sufficiently developed to attract attention, he had his life insured, being examined and pronounced sound, and an eligible risk. The attending physician informed me that the patient had consulted him some weeks ago in consequence of passing large quantities of urine. The doctor examined the urine and found it perfectly normal as to its constituents, and specific gravity, and he considered it as being merely a case of *diabetes insipidus* depending upon some nervous or digestive functional disturbance. No doubt the increased flow of urine was due to the increase of blood pressure in the renal glomeruli from irritation of the sympathetic vaso-motor ganglia controlling the renal circulation. The patient shortly after the examination of his urine left St. Catharines to undertake certain duties in connection with the "Grimsby Camp Ground," and while there consulted a local practitioner, who suspected from the disturbance of the stomach, and the unaccountable weakness and faintness of which the patient complained, that he was suffering from tape-worm, *tænia solium.* As no proper remedies were obtainable at the Camp Ground to eject the supposed intestinal incumbent, Dr. Leitch of this city was written to, and forwarded a mixture containing *extract of malefern and castor oil. Ex. nihilo, nihil fit;* therefore no tape-worm made its appearance "*per vias rectas*," but, unfortunately, terrible prostration supervened, rendering the patient entirely unfit for duty, and compelling him to return home to his father's house in this city. On his arrival he was seen by two of our local physicians. They did all in their power to relieve the patient, who appeared to be suffering from some anomalous affection, the symptoms of which were prostration, præcordial distress, nausea, anorexia, and hiccough. There was no pain, no fever, no indication of hepatic, cardiac, renal, cerebral, or intestinal disease, in fact it was impossible to locate the disease in any organ, tissue, or viscus of the body. The extremities were cold,—from contraction of the arterioles owing to vaso-motor irritation (?)—the temperature was normal, the pulse feeble and slow, from stimulation of the inhibitory centres owing to the condition of the mucous lining of the stomach influencing the terminal branches of the Vagi (?), and yet there was nothing definite or demonstrable to account for the great and increasing prostration which was rapidly passing into fatal collapse. The attending physicians, baffled by the extraordinary nature of the affection, inferred from the condition of the stomach, the nausea, hiccough, &c., that the disease *might* be localized in the liver or alimentary canal, and so medication was directed to those quarters; but all without avail, the patient continued to sink lower, and lower still. On the evening of the day before the patient succumbed I was called to see him in consultation. After hearing from the attending physician and the parents the history of the case, it occurred to me that possibly the patient might be suffering from disease of the supra-renal capsules, although up to that time I had not been aware of the existence of any discoloration of the skin. Upon asking the patient's mother if she had at any time observed any peculiar color of the skin on any part of the body, she said, "Yes, for the last six months his face, neck, and the backs of his hands had a dark, smoky look; that she used to think his skin was stained with dirt, and asked him why he did not wash it off?" He replied that he "could not wash it off." The patient himself also told me that he noticed the peculiar color of his skin, but that he could not account for it. He never spoke of it to his medical attendant, as he did not associate it in any way with his failing health and strength. On examining the backs of his hands I noticed the lustreless bronze color, but, strange to say, during the preceding week the natural color seemed to have returned to his face and neck as the symptoms of collapse became more marked; so that seeing him in the evening, by lamp-light, I should not have noticed anything abnormal in the appearance

of the skin if I had not closely examined his hands. His mother told me that during the last six months his face at times was as dark as an Indian's. Since his death a number of his acquaintances have spoken to me concerning his peculiar color. The patient died at 6 o'clock p.m., July the 27th, 1881. He was pulseless for some time prior to his death, and retained his consciousness to the last. His muscular weakness was so great that he could not move hand or foot, and constantly begged to be shifted from side to side, and to have his hands and arms pulled and stretched. His restlessness was distressing in the extreme, and was relieved in a measure by nutritive enemata containing cream, brandy, and McMunn's Elixir Opii. Ingesta by the mouth seemed to increase the præcordial anxiety, and produce hiccough. Strange to say he could always check the hiccough by holding his breath, and when so doing the pulse would vanish at the wrist until he resumed respiration. Twenty hours after death my friend Dr. Leitch, the attending physician and I made a *post mortem* examination of the remains. The body was rather emaciated, but not excessively so. There was no appearance of the bronzing remaining, except upon the backs of the hands. The lungs were healthy. There was slight adhesion between the pulmonary and costal pleuræ near the base of the right lung. The heart was small, but otherwise normal, both as to its walls and valves. There was an *ante-mortem* clot, white, but not very tenacious, filling the cavity of the right ventricle and extending into the pulmonary artery. The formation of this heart-clot was no doubt due to the slowness of the circulation for some time prior to death, and probably accounted for the disappearance of the pulse at the wrists. The liver was normal in size, but rather congested, and exuded dark blood when sliced. The kidneys were normal, but slightly congested; so were the small intestines, with the exception of several *maculæ*, like purpuric spots, which seemed to stain the walls of the *jejunum* and *ileum*, and were probably due to the same cause which produced the bronzing of the skin. The large intestines were healthy. There was a small fatty tumor on the upper surface of the liver, not larger than a pea, which could not have produced any symptoms during life. The brain and spinal cord were not examined. *Both supra-renal capsules were extensively diseased.* That on the right side was converted into a dense fibroid mass, as tough as cartilage, and was much enlarged. The capsule of the left side was still more hypertrophied, and consisted of a caseous substance, rather friable, and studded with calcareous particles in its cortical portion. The medullary portion of the left capsule contained a cyst, lined with a smooth membrane, which had a small quantity of milky-looking, puriform fluid in its interior. A warty excrescence was imbedded in the floor of the cyst about the shape and size of a small-pox pustule. This morbid growth was hard and fibrous, and was pitted on its rounded apex with a depression like a rudimentary nipple. Although up to the present time *morbus Addisonii* has been looked upon as absolutely incurable, if the nature of the malady had been suspected earlier something might possibly have been done to mitigate the sufferings of the patient. As the malady seems mainly to exert its injurious influence on the system through the medium of the solar plexus, splanchnics, and great sympathetic, opium, belladonna, chloroform, nitrite of amyl, or alcohol, or indeed any remedy which would counteract its tendency to morbid contraction of the arterioles might be looked upon as indicated on physiological grounds. The irritation of the nerves of organic life is no doubt due to the morbid process going on in the capsules, and whilst unfortunately no means exist of detecting the disease in its very earliest stages, or of arresting the morbid process, the administration of remedies of the nature indicated, either by the mouth, or by hypodermic injection, would doubtless ameliorate the patient's condition, if they did not cure. If the disease should primarily depend upon affection of the sympathetic ganglia themselves, then, possibly, the *neurasthenia* having been over come, the organic changes produced by the nervous disease might also be put an end to *pari passu*. Doubtless the feeble action of the heart, the *bulimia*, from which at one time the patient suffered, the polyuria, the præcordial distress, and the profound depression, were all due to the persistent irritation set up in the sympathetic ganglia by the capsular disease. The great vascularity of the capsules, and their very abundant innervation from the sympathetic (the cells of the medullary portion of the capsules seeming to be identical with the ganglionic nerve cells), are quite sufficient to account for the fatal results attending their disor-

ganization, without the need of associating as a cause of death a supposed function of removing some element from the blood, the non-removal of which would occasion death by blood-poisoning. Brown-Séquard found that removal of the capsules in the inferior animals occasioned death more rapidly than removal of the kidneys. It would scarcely seem possible that the function of the capsules as blood-glands could be so important as that of the kidneys, and, therefore, if death occurs so rapidly after their removal it must be due to the fatal shock produced by the injury to the great sympathetic through the solar plexus and splanchnics, as the capsules appear to have more intimate vital relations with the nerves of organic life than any other viscus of the body. I have dwelt upon this remarkable association of the ganglionic system of nerves with the capsules, not only on account of its great physiological interest *per se*, but because I conceive that it furnishes a key to the many anomalous symptoms which arise during the existence of the disturbance of the functions of any or all of the abdominal, thoracic, or pelvic viscera, in consequence of the irritation of the sympathetic ganglia, which preside over their organic functions, occasioned thereby. Disease of the supra-renal capsules seems to possess symptoms common to cardiac, hepatic, renal, gastric, intestinal, cerebro-spinal, and ovarian disease, simply because it affects the sympathetic as powerfully as all these disorders combined, and it is only by *excluding* the above-named affections, *in the absence of the bronzing of the skin*, that a differential diagnosis can be arrived at. The absence of jaundice, and the "pearly" conjunctiva excluded hepatic disease; the normal urine, renal disease; auscultation, cardiac and pulmonary disease; absence of affections of sensation or motion, cerebro-spinal disease; palpation, ovarian disease. In conclusion, a thoughtful consideration of the case of Robert L——, points out the necessity of familiarizing ourselves with the latest teachings of physiology and pharmacology, if we would successfully combat the protæan forms of nervous disease, manifesting itself in aberrations of motion, sensation, secretion, circulation, and nutrition, and in perversions of the moral and intellectual faculties of the brain.

Correspondence.

INTUSSUSCEPTION—RECOVERY.

To the Editor of the Canada Lancet.

Sir,—On Saturday, September, 4th, I was called to see a case which appeared to puzzle the attending physician beyond measure. I found upon my arrival a young man aet. 19 in dorsal decubitus, with knees drawn up and complaining of nausea and pain over the abdomen, which was most severe in the ileo-cæcal region. On questioning I learned that no movement of the bowels had taken place for two days previous, although there had been a discharge of blood and mucus. There was great tympanites present, but pressure did not intensify the pain as I expected it would. The pulse was 110, and the temperature nearly normal, and spontaneous vomiting of a brown fluid, having a slightly fæcal odor now occurred. The thirst was intense, but when fluids were swallowed, they were immediately ejected. I ordered ice with better effect, as the vomiting did not occur again. I diagnosed the case to be intussusception; the attending physician coinciding with my opinion. From the symptoms present I resolved to try injections of warm water and turpentine every two hours, and this failing obtain competent surgical aid and perform laparotomy. Next day I again visited the case and was pleasantly surprised to find a marked improvement, the tympanites reduced and gases with an offensive odor escaping although no movement of the bowels had taken place, but he as had not eaten solids for three days this did not cause any fresh alarm. I left the house with directions to continue the injections as before and report to me next day the progress made during the night, when I was still further suprised to hear of marked improvement in every particular, and food was retained. I have not seen him since but keep myself informed each day, and the movement of the bowels is normal. No abdominal tumor could be discovered owing to the excessive tympanites that existed when I first saw the case. My object in reporting this case is simply to shew that surgical interference is not always necessary or justifiable, but had my experience as a surgeon been such that I could have operated myself, I would undoubtedly have done so, and distance from competent aid led me to try the above alter-

native. Hoping that you may consider this worthy a place in your valuable journal.

I remain yours respectfully,

T. R. Hossie, M.D.

Gouverneur, N. Y. Sept. 10th 1881.

SPRUCE SHAVING SPLINTS.

To the Editor of the Canada Lancet.

Sir,—In these progressive times when comfort is the order of the day, I have much pleasure in bringing under the notice of the Association, the application of the "Spruce Shaving Splint" in cases of fractured arm and humerus. In January 1881, I had occasion to use this Splint at a time when no other material could be obtained, and the result was of the most satisfactory character. Such shavings are now used by Mr. Eddy, for the manufacture of ordinary match boxes, and to prevent painted wooden ware, from adhering together, thus I came in contact with the material. By placing 5 or 6 of these shavings together, a splint is at once formed, of great practical utility. In the first place, it possessed lightness; secondly pliability, and thirdly when well padded, it actually hugs the arm, in a manner, superior to any splint, I have had occasion to use, either in hospital, or private practice. Again should the case be one of compound fracture, in which the secretions, rendered it necessary to change the support of the arm, the whole splint, would not require removal, as an outside or inside shaving could at any time, be taken away, without necessarily disturbing the whole arm. In a recent case of dislocation and fracture, at the elbow joint, I was much pleased with the use of this splint, particularly, as to the manner in which it flexed round the posterior part of the joint, the splint in the posterior aspect of the arm, being extended in that direction. Thus the elbow joint was retained in its normal position, with ease and comfort. Of the various forms of timber, spruce, is the only fibre known, which possesses, the requisite pliability and flexibility, to undergo the fine shaving process of manufacture. This has been tested most thoroughly, in the construction of match bones. From the foregoing facts, it appears, that in the "Spruce Shaving Splint," we have an inexpensive, light, pliable and practical appliance, which will be found of great service either in civil or military practice.

Yours respectfully,

J. A. Grant.

Ottawa, July, 2nd 1881.

Reports of Societies.

TORONTO MEDICAL SOCIETY.

April 21st, 1881.—The meeting was called to order at 8 p. m. the President Dr. Covernton in the chair. The minutes were read and confirmed.

Dr. Oldright exhibited a placenta with a peculiar attachment of the membranes. Dr. Sheard exhibited a stricture of the sigmoid flexure and rupture of the colon at the junction of the descending and transverse portions. Dr. Riddel exhibited a triangular plate of fish bone, extracted by means of a piece of bellwire from the œsophagus of a lady by whom it had been swallowed. Dr. Ross Jr. related a case of skin disease. Dr. Sheard then read a paper upon the pathology of tubercle. The first portion of his paper dealt with the nature of tubercle, and in it he gave the chief histological characteristics. In the second portion of his paper he discussed the etiology of the disease, describing the results of experiments upon animals, made with a view of artificially producing tubercle. He advanced the view of a preliminary inflammatory action before the deposit of tubercle, exhibiting a human lung, in support of this view, in which the upper part was distinctly tuberculous and the lower part as distinctly in a condition of red hepatization. An interesting discussion followed the reading of the paper.

The nomination of officers for the ensuing year then took place and the meeting adjourned.

May 5th.—After routine Dr. Covernton, the retiring President read his valedictory address in which he reviewed the status of medical men, and said that the public did not always appreciate their efforts; he also touched upon the benefits of Medical Societies, reviewed the work done in the past year, and congratulated the Society upon its flourishing condition.

The election of officers for the ensuing year was then proceeded with, which resulted as follows: Dr. Daniel Clark, President, Dr. Graham 1st Vice-President, Dr. Oldright, 2nd Vice-President, Dr. Macdonald, Treasurer, Dr. Alex. Davidson, Record-

ing Secretary, Dr. Sheard Corresponding Secretary, Drs. A. H. Wright, Lett and Spencer, Councillors,

Dr. Temple exhibited an acephalous monster, and the meeting then adjourned.

May 19th.—The Society met at 8 p.m., the newly elected President in the chair. After the reading of the minutes, and other preliminary business, Dr. Oldright exhibited a bullet, which after passing through several partitions of wood and lath and plaster, had inflicted a cleanly incised wound on a child's head.

Dr. Cameron, related a case of a cherry stone being extruded from an aged person's nose, he could not say how it had got there or how long it had been there, but the patient affirmed that she had not eaten cherries since last November.

Dr. Riddel related a case of confinement in which when he was about to relieve retention of the urine by the catheter he discovered two large chancres on the labia pudendi.

Dr. Oldright made reference to the painful interest the Society would take in hearing of the illness of Dr. DeGrassi and Dr. McPhedrain; the same gentleman also referred to the case of a little girl two and half years old, in which there existed an abdominal tumor principally occupying the right side, it was rapid in its growth, elastic to the touch, but when aspirated it gave no evidence of its being a fluid tumor, a small quantity of fluid withdrawn in the aspirator needle and examined microscopically did not give any evidence of malignancy. Dr. Workman mentioned a similar case which proved to be malignant.

Dr. Riddel read an article upon the career of Dr. Tumblety, "The Indian herb Doctor," which dilated upon his wonderful cures and his wholesale quackery, after which the Society then adjourned.

June 30th.—The Society met at 8 o'clock, the President in the chair, the minutes of the previous meeting were read and adopted. Dr. King was then proposed a member of the Society.

Dr. Sheard exhibited the lungs, liver and kidneys taken from a person the subject of syphilis; the liver contained abscess cavities. The lungs were tuberculous and the kidneys showed, desquamation of the uriniferous tubes.

Dr. Cameron exhibited a thrombus of the longitudinal sinus taken from a child seven months old, he also exhibited the cerebral vessels taken from the same case, with masses attached to them which he took to be syphilitic gummata; the same gentleman also exhibited a portion of a tibia which had been spontaneously amputated at the seat of a malignant ulcer.

Dr. Riddel then related a case of miscarriage at the seventh month, followed by septicæmia, the fœtus being a monstrosity.

Dr. Graham, then read a very excellent and exhaustive paper upon leucocythæmia, in which he related the histories of two cases which he had recently had under his observation, at the Toronto General Hospital, the first case being that of the lymphatic variety, and the second case being that of the splenic variety, he also referred to the myologenous form, a very rare variety of leucocythæmia. The disease seemed to baffle all treatment, and progressed slowly and surely to a fatal termination, the only treatment thought to be beneficial would be prophylaxis, could the cause of the disease be once arrived at; chaulmoogra oil was tried but with no benefit. The reader while he drew a difference between leucocythæmia, and Hodgkin's disease, thought that the disease under consideration and the so-called malignant, growths were related to one another. In concluding his paper Dr. Graham ventured the following opinion.

1st. That the essential features of leucocythæmia are lymphoid deposits, and leucocytes derived from them.

2nd. Similar growths are the features of Hodgkin's disease, but the cells do not enter the circulation.

3rd. That in both diseases the presence of these deposits interferes with the manufacture of the red blood corpuscle, producing anæmia.

4th. That these growths bear a strong relation to malignant growths, especially sarcomata.

5th. That Progressive Pernicious anæmia may arise as a consequence of leucocythæmia or Hodgkin's disease, in the same way that it may follow pregnancy or any other disease which interferes with the proper elaboration of the blood.

The discussion on Dr. Graham's paper was deferred to the next meeting of the Society owing to the lateness of the hour.

The Treasurer, Dr. Macdonald, then read his report for the bye-gone year which showed the Society to be in a very flourishing condition.

Selected Articles.

INTERNATIONAL MEDICAL CONGRESS.

ADDRESS BY THE PRESIDENT, SIR JAMES PAGET, BART.

We are indebted to the N. Y. Med. Record for the following Reports :—

After referring to the composition of the Congress, the diverse characters of its members, and the various methods of study which had gained eminence for each, he dwelt upon the necessity of utilizing the apparent diversity of thought into a concentrated and harmonious whole. In works done by dissimilar and independent minds, dispersed in different fields of study, or only gathered into self-assorted groups, there was apt to be discord and great waste of power. There was, therefore, need that the workers should from time to time be brought to some consent and unity of purpose ; that they should have opportunity for conference and mutual criticism, for mutual help and the tests of free discussion. This it was which, on the largest scale and most effectually, the Congress might achieve ; not, indeed, by striving after a useless and happily impossible uniformity of mind or method, but by diminishing the lesser evil of waste and discord which was attached to the far greater good of diversity and independence. Now, as in numbers and variety the Congress might represent the whole multitude of workers everywhere dispersed, so in its gathering and concord it might represent a common consent that, though apart and different, yet the work was and should be essentially one ; in all its parts mutually dependent, mutually helpful—in no part complete or self-sufficient. It might seem to be a denial of the declaration of unity that, after this general meeting the Congress should separate into sections more numerous than on any former occasion. He would speak of these sections to defend them ; for some had maintained that, in such a division of studies, there was a mischievous dispersion of forces. He observed that the sections which we have instituted are only some of those which are already recognized, in many countries, in separate societies, each of which has its own place and rules of self-government, and its own literature. And the division had taken place naturally, in the course of events which could not be hindered. For the partial separation of medicine, first from the other natural sciences, and now into sections of its own, had been due to the increase of knowledge being far greater than the increase of individual mental power. He did not doubt that the average mental power constantly increased in the successive generations of all well-trained peoples ; but it did not increase so fast as knowledge does, and thus, in every science, a small portion of the whole sum of knowledge had become as much as even a large mind can hold and duly cultivate. Many of us might, for practical life, have a fair acquaintance with many parts of our science, but none can hold it all ; and for complete knowledge, or for research, or for safely thinking out beyond what was known, no one could hope for success unless by limiting himself within the few divisions of the science for which, by nature or by education, he was best fitted. Thus, the division into sections was only an instance of that division of labor which, in every prosperous nation, we see in every field of active life, and which was always justified by more work better done. Moreover, it could not be said that in any of our sections there was not enough for a full strong mind to do. If any one doubted this, he might try his own strength in the discussions of several of them. In truth, the fault of specialism was not in narrowness, but in the shallowness and the belief in self-sufficiency with which it was apt to be associated. If the field of any specialty in science was narrow, it could be dug deeply. In science, as in mining, a very narrow shaft, if only it be carried deep enough, might reach the richest stores of wealth and find use for all the appliances of scientific art. Not in medicine alone, but in every department of knowledge some of the grandest results of research and of learning, broad and deep, were to be found in monographs on subjects that, to the common mind, seemed small and trivial.

Study in such a Congress might be a useful remedy for self-sufficiency. Here every group might find a rare occasion, not only for an opportune assertion of the supreme excellence of its own range and mode of study, but for the observation of the work of every other. Each section might show that its own facts must be deemed sure, and that by them every suggestion from without must be tested ; but each might learn to doubt every inference of its own which was not consistent with the facts or reasonable beliefs of others ; each might observe how much there was in the knowledge of others which should be mingled with its own ; and the sum of all might be the wholesome conviction of all, that we cannot justly estimate the value of a doctrine in one part of our science till it has been tried in many or in all. The test of truth in every part should be in the patient and impartial trial of its adjustment with what was true in every other. For every fact in science, wherever gathered, had not only a present value, which we might be able to estimate, but a living and germinal power of which none could guess the issue. It would be difficult to think of anything that seemed less likely to acquire practical utility than those researches of the few naturalists who, from Leeuwenhoeck to Ehrenberg, had studied the most minute of living things, the vibrionidæ. Men boasting themselves

as practical might ask, "What good can come of it?" Time and scientific industry had answered, "This good: those researches had given a truer form to one of the most important practical doctrines of organic chemistry; they had introduced a great beneficial change in the most practical part of surgery; they were leading to one as great in the practice of medicine; they concerned the highest interests of agriculture, and their power is not yet exhausted." And as practical men were, in this instance, incompetent judges of the value of scientific facts, so were men of science at fault when they missed the discovery of anæsthetics. Year after year the influences of laughing-gas and of ether were shown: the one fell to the level of the wonders displayed by itinerant lecturers, students made fun with the other; they were the merest practical men, men looking for nothing but what might be straightway useful, who made the great discovery which had borne fruit not only in the mitigation of suffering, but in a wide range of physiological science.

The history of science had may similar facts, and they might teach that any man would be both wise and dutiful if he would patiently and thoughtfully do the best he could in the field of work in which, whether by choice or chance, his lot had been cast.

The best work of the International Congress was in the clearing and strengthening of the knowledge of realities; in bringing, year after year, all its force of numbers and varieties of minds to press forward the completion as might from year to year be possible. Thus, chiefly, the Congress might maintain and invigorate the life of our science. And the progress of science must be as that of life. It sounded well to speak of the temple of science and of building and crowning the edifice. But the body of science was not as any dead thing of human work, however beautiful; it was as something living, capable of development and a better growth in every part. For as in all life the attainment of the highest condition was only possible through the timely passing-by of the less good, that it might be replaced by the better, so was it in science. As time passed, that which seemed true and was very good became relatively imperfect truth, and the truth more nearly perfect took its place. In the certainty of this progress, the great question was, What should we contribute to it? It would not be easy to match the recent past. The advance of medical knowledge within one's memory was amazing, whether reckoned in the wonders of the science not yet applied, or in practical results in the general lengthening of life, or, which was still better, in the prevention and decrease of pain and misery, and in the increase of working power. He could not count or recount all that in this time had been done; and he supposed there were very few, if any, who could justly tell whether the progress of medicine had been equal to that of any other great branch of knowledge during the same time. He believed it had been; he knew that the same rate of progress could not be maintained without the constant and wise work of thousands of good intellects; and the mere maintenance of the same rate was not enough, for the rate of the progress of science should constantly increase. That in the last fifty years was at least twice as great as that in the previous fifty. What would it be in the next, or, for a more useful question, What should we contribute to it?

"In the number and intensity of the questions brought before us," said he, "we may see something of our responsibility. If we could gather into thought the amounts of misery or happiness, of helplessness or of power for work, which may depend on the answers to all the questions that will come before us, this might be a measure of our responsibility. But we cannot count it; let us imagine it; we cannot even in imagination exaggerate it. Let us bear it always in our mind, and remind ourselves that our responsibility will constantly increase. For, as men became in the best sense better educated, and the influence of scientific knowledge on their moral and social state increases, so, among all sciences there is none of which the influence and, therefore, the responsibility will increase more than ours; because none more intimately concerns man's happiness and working power.

"But, more clearly in the recollections of the Congress, we may be reminded that in our science there may be, or, rather, there really is, a complete community of interest among men of all nations. On all the questions before us we can differ, discuss, dispute, and stand in earnest rivalry; but all consistently with friendship, all with readiness to wait patiently till more knowledge shall decide which is in the right. Let us resolutely hold to this when we are apart; let our internationality be a clear, abiding sentiment, to be, as now, declared and celebrated at appointed times, but never to be forgotten; we may, perhaps, help to gain a new honor for science if we thus suggest that in many more things, if they were as deeply and dispassionately studied, there might be found the same complete identity of international interests as in ours.

"And then, let us always remind ourselves of the nobility of our calling. I dare to claim for it, that among all the sciences, ours, in the pursuit and use of truth, offers the most complete and constant union of those three qualities which have the greatest charm for pure and active minds—novelty, utility, and charity. These three, which are sometimes in so lamentable disunion, as in the attractions of novelty without either utility or charity, are in our researches so combined that, unless by force or wilful wrong, they can hardly be put asunder. And each of them is admirable in

its kind. For in every search for truth we can not only exercise curiosity, and have the delight—the really elemental happiness—of watching the unveiling of a mystery, but, on the way to truth, if we look well round us, we shall see that we are passing among wonders more than the eye or mind can fully apprehend. And as one of the perfections of nature is that, in all her works, wonder is harmonized with utility, so is it with our science. In every truth attained there is utility either at hand or among the certainties of the future. And this utility is not selfish: it is not in any degree correlative with money-making; it may generally be estimated in the welfare of others better than in our own. Some of us may, indeed, make money and grow rich; but many of those that minister even to the follies and vices of mankind can make much more money than we. In all things costly and vainglorious they would far surpass us if we would compete with them. We had better not compete where wealth is the highest evidence of success; we can compete with the world in the nobler ambition of being counted among the learned and the good who strive to make the future better and happier than the past. And to this we shall attain if we will remind ourselves that, as in every pursuit of knowledge there is the charm of novelty, and in every attainment of truth utility, so in every use of it there may be charity. I do not mean only the charity which is in hospitals or in the service of the poor, great as is the privilege of our calling in that we may be its chief ministers; but that wider charity which is practised in a constant sympathy and gentleness, in patience and self-devotion. And it is surely fair to hold that, as in every search for knowledge we may strengthen our intellectual power, so in every practical employment of it we may, if we will, improve our moral nature; we may obey the whole law of Christian love, we may illustrate the highest induction of scientific philanthropy.

"Let us, then, resolve to devote ourselves to the promotion of the whole science, art, and charity of medicine. Let this resolve be to us as a vow of brotherhood; and may God help us in our work."

ADDRESS BY PROFESSOR VIRCHOW.

Professor Virchow, of Berlin, delivered an addres, in German, on the value of experimental pathology. He commenced by referring to the great activity of the anti-vivisectionists, and the harm they had done to experimental physiology and pathology. The latter, as well as the former, had its claims for defence from all scientific men. In connection with the general subject, he proceeded to examine the decline of the science of symptoms, and of the falling off of an interest in the study of their relations to pathology. Were symptoms no longer to possess any significance for the medical man? He would say certainly not. At the same time, for the scientific medical man, symptoms were only the expression of a hidden force, it was his business to follow up this hidden force to its seat in the human system, and there learn its nature and causes. The first question of the pathologist, as of the biologist, was, Where? Consequently, whether they probed the seat of disease with the anatomical knife, or whether they merely confined themselves to observation, the mode of proceeding was essentially anatomical. It was the recognition of this principle which, in a few decades, had changed the whole face of science. Especially was this change observable in the treatment of ophthalmic diseases. Every practitioner now studied the seat of the evil itself, and not merely its symptoms. Even the anti-vivisectionists recognized the value of this method, forgetting, however, that every organ of the body was not so favorably situated for observation as the eye. The principle of modern medicine, in a word, was that of localization. Vivisection dated really from the time of Harvey. Now, Harvey's services the strongest opponents of vivisection themselves recognized; but, said they, since Harvey's time vivisection has revealed nothing important. They were not aware that that very element in the phenomena of Harvey's circulation of the blood, which most affected the vital attributes of the organs of circulation, remained untouched. Whence was derived the activity of the heart? What part in the motion and the distribution of the blood did the organs of the body play? What share devolved upon the arteries, the veins, and the capillary vessels? All those questions were of the highest practical importance, and none of them could be solved otherwise than by experiments upon living animals. Those questions Harvey could not settle, because, in his time, higher anatomy had not been developed. Who then knew anything of the heart or of the nerves? Not till these latter days did men understand the peculiarities of the circulation of the blood. The pulse, that highly-prized object of the old symptomatology, was now intelligible. It was no longer regarded as presenting the symptom of this or that disease, but as the sign of the existence or non-existence of certain principles of activity, of the strength or the weakness, the irritation or the relaxation of certain tissues. The development of physiology and pathology paved the way for the later experimenters, and accounted for the long interval which had elapsed since Harvey's time. Our modern science, indeed, had been but of slow growth, but as it grew, one thing became clearer and clearer—namely, the principle of inherent vitality—the *vita propria* of each section of the body (*das Eigenleben der Theile*). Every step showed more conclusively that the supposed existence of life, as a large and separate entity, was a fiction. Life existed everywhere in the body; and disease

and life—or, to speak more properly, diseased and healthy life—existed perfectly well side by side, in the sense that disease indicated so much abstracted from the healthy life. Disease, in fact, was no longer spiritualized: it was a material entity, a real living thing, a cellular change (*die veranderate Zelle*). Had all these discoveries resulted in tangible advantage to us? Was it worth while for such results that so many animals should suffer pain and death? The questions he could confidently answer in the affirmative. How, he asked, could further important results in the science of healing be looked for, if experiments with animals were prohibited? How else, for instance, could the operation of chloral have been discovered? It could not seriously be expected that medical men should make their own bodies the subject of experiments with very various and perhaps poisonous substances. They were already more exposed to danger in their contact with disease than any other class of the population. If no suffering whatever was to be inflicted upon animals, our social habits in relation to horses, dogs, etc., would be very much altered. It was absurd to contend, as the vivisectionists did, in effect, that suffering was worse than death. There was no greater hardship involved in putting animals to death, in order to promote the public welfare by means of scientific experiment, than in killing them for food. Abuses, of course, he did not defend, but so long as every person who owned an animal had the right of killing it, necessarily it followed that scientific experiments involving the death of animals were justifiable. And of the necessity of these experiments, and the mode of carrying them out, the investigator alone could be the judge, though, as to the question of time and place, a judicial authority might fairly have something to say.

At the conclusion of his address, which lasted over an hour, and which, marked as it was by many gleams of humor and passages of eloquence, evoked much applause, the learned Professor pleaded that vivisectionists should not be regarded as heartless barbarians, but as men who were working to promote the welfare of humanity. Of science it might be said, as Bacon said of the sun —"Palatia et cloacas ingreditur, neque tamen polluitur."

CASES IN HOSPITAL PRACTICE.

CLINIC BY AUSTIN FLINT, M.D., NEW YORK.

Cirrhotic Liver.

This specimen was taken from the woman who was shown you at a former clinic, and represents the gross appearance of a cirrhotic liver. It is very much contracted, and presents the hob-nailed appearance in a very marked degree. I will only say, regarding the case, that the patient was tapped several times for abdominal fluid distention, which gave marked relief, and probably prolonged life. She gradually failed, however, lost her appetite, and died of exhaustion. When the autopsy was made, the liver weighed thirty ounces, the normal weight of the liver being about four and a half pounds.

The next cases that I shall present to you, gentlemen, are examples of a disease which I leave for my colleague, Dr. Janeway, to lecture upon. But as there is no didactic course at present, I will make some remarks upon these cases. The history of the first patient reads as follows:—

Aphasia.

David ——, fifty-five years of age, a laborer, a native of Ireland, admitted on the eighth of this month. He has been for years a hard drinker, frequently going off on a prolonged debauch, and being drunk most of the time for a month or two. About six weeks ago he was suddenly taken with convulsions, grew black in the face, foamed at the mouth, worked the legs and arms, and then lay in an unconscious state for several hours. His condition gradually improved, and after four or five days he went to work again. Two weeks ago he was attacked in a similar manner, and when consciousness returned it was found that he could not speak, and that his right side was paralyzed. Since then he has been lying in a stupid condition, unable to speak, with but slight power of motion, and rejecting all food. That was the history obtained when he entered, on the eighth instant. On his admission no history could be obtained from him. He had aphasia; was stupid; the pupils were normal; there was no paralysis, no cardiac affection; the arteries were atheromatous. The arteries now feel like a tube composed of hard rings. On the 10th he was a little less stupid, and, although articulation is difficult, he can speak a few words. He takes food much better. The urine is albuminous, but no casts have yet been found, of normal specific gravity.

This, then, is a case of aphasia, connected with paralysis of the right side. These attacks of epileptoid convulsions were very probably due to the excessive use of alcohol, although there is ground for strong suspicion that there exists renal disease. I do not think it is possible, from what data we have, to decide whether the coma and convulsions were alcoholic or uræmic; there may have been a mixture of both. He has recovered from the paralysis, so that we may conclude that there was no extravasation of blood; there was either thrombosis or embolism, not sufficient to produce any persistent obstruction.

Now, in regard to the aphasia, of which I wish to speak in connection with this and another case;

the patient is now able to speak, but how much it is difficult to tell, for he was and is stupid, his general mental faculties being oppressed. Before making further remarks, I will bring in the next patient.

No previous history was obtained of this patient, but he has a pulmonary affection, and when he entered the hospital, about three months ago, he had complete aphasia, and paralysis of the right side of the face. You notice that to-day there is scarcely any paralysis of the face, and that he can speak, although he uses words with difficulty, and sometimes uses wrong ones. He has, then, paraphasia.

I will present some general remarks in connection with these two cases, but have not time to go fully into the subject of aphasia. We mean by aphasia the loss of speech, in contradistinction to the loss of voice, which is aphonia. As a rule, aphasia occurs in connection with right-sided paralysis or hemiplegia. With few exceptions the paralysis is on the right side. The cerebral lesion, of course, being on the left side. But we sometimes meet with aphasia, as in this case, without any paralysis of the extremities; there is no evidence that this patient had any paralysis of the upper or lower limbs, but, as you see, he has some paralysis of the facial muscles. We may have aphasia, however, without any motor paralysis. We occasionally meet with cases of that kind. Aphasia has given rise to a good deal of observation and discussion within the past few years, and it still opens a field for discussion, and further investigations are very much to be desired. We have come to know that, in a large proportion of cases of aphasia, a lesion of some kind exists in the left anterior portion of the cerebrum, in the neighborhood of the island of Reil, and more especially in the posterior part of the third frontal convolution. Now, we may assume that this localization is the rule, but with some exceptions. In some exceptional instances the lesion is similarly located on the right side, giving rise to left hemiplegia; and in some instances, as stated, the lesions are found elsewhere, while the situation in which lesions are usually found is free from lesions. There is always some room for doubt in regard to the latter part of the statement, because there may be lesions which may escape attention unless very close examination be made, and perhaps the closest examination may fail to discover a lesion which does exist.

Now, when we come to the symptom, we find that it differs in different cases, and there are different varieties of aphasia, and some writers, especially the author on that subject in Ziemssens' Cyclopedia, go very much into refinements, in some of which I do not see any practical advantage. But some distinctions are obvious and important. There is one variety of aphasia in which the patient has evidently in mind the appropriate words for expressing the idea; that is, there is no lack of the symbols of ideas which language furnishes in the mind of the patient, but the patient cannot give utterance to those words. The words are in the mind, but they cannot be conveyed by speech. And when this kind of aphasia is complete the patient is perfectly mute, and says nothing, and makes no effort to say anything. That is known as ataxic aphasia, but it is not a proper term, for ataxic means a lack of coördinating power in the muscles, but the patient does not move the muscles at all. You cannot compare it with a case of locomotor-ataxia, in which the patient uses the muscles, but does not use them right. As just said, in this so-called ataxic aphasia there is no effort to use the muscles. Exactly what the nature of the difficulty is, it is difficult to say. But we see the character of the difficulty; the patient cannot give utterance to the words which are in his mind, to express his ideas. That the words are in his mind is evidenced by the fact that he can write them. He knows and understands the words, but cannot give utterance to them.

Then, there is another variety of aphasia known as amnesic aphasia, in which the patient cannot communicate the words expressing ideas, either orally or by writing. This implies a greater aphasic effect than the other. There is still another, in which the patient cannot communicate his ideas by signs, and he does not understand words when spoken to him. Here we have a combination of the different varieties. But in this latter case it seems to me clear enough that there is a condition of mental imbecility. A pretty important conclusion, if true; although I would not say that the patient must necessarily be altogether without intelligence, like an idiot. The difficulty involved carries with it a certain grade of insanity, so that the patient is not accountable for acts. But in ataxic aphasia there is every reason to believe that the patient may preserve the intellectual faculties intact, being capable of performing important acts which shall stand in law, such as the making of a sale, transferring property, and so on. That is a question of much interest and importance when made the occasion of very important medico-legal investigation.

Then, there is another form still, in which the patient has not lost the power of endeavoring to express words by speech, but there is not the command of words which the patient wishes to use to express ideas. He uses wrong words, as this second patient does; although he has improved to a certain extent, he uses wrong words, paraphasia, as it is called. Such a patient seems, sometimes, to have clear enough ideas in the mind, but when he attempts to convey them he uses language which conveys to the listener no apprehension of the ideas which he wishes to express. I have been

for several days seeing a patient who has this form of aphasia. There was a little paralysis of the right side, perhaps a little now, but it is very slight. That patient, whenever I see him, endeavors with the greatest possible earnestness to try to express something to me, but he uses incoherent words; his speech is a jumble of words, so that one cannot form the least idea, from the words he uses, of the ideas which he wishes to convey, and that fact gives him, as it is apt to do patients who retain their intellectual faculties more or less complete, an intense feeling of chagrin, so that after talking that way for a while he becomes almost wild with a feeling of irritation. Paraphasia is the proper name for it. In a practical view this is probably a sufficiently comprehensive representation of this symptom.

Now, these forms of aphasia depend upon the different causes which may give rise to paralysis; and aphasia usually, but as I have stated, not invariably, is associated with paralysis. These different conditions are: Extravasation of blood, and the formation of a coagulum within the brain, thrombosis, the obstruction of an artery by the conveyance to it and lodgment in it of a clot from the heart, embolus. These are the three causes which stand in relation to the aphasia and the paralysis in the great majority of cases; but other lesions of the brain may be the cause, such as a syphilitic growth, and tumors of different kinds, etc.; but I repeat that, in the great majority of cases, when we come to the question of pathological condition, we have to decide between extravasation of blood, thrombosis and embolism. I would take up some differential points, etc., but we have not time to-day.—*Med. and Surg. Reporter.*

ABDOMINAL SURGERY AND LISTERISM.

The three topics of interest in the Surgical section of the International Medical Congress were Abdominal Surgery, "Intra Peritoneal," the programme had it, Modern Lithotrity,—they wont say "Litholapaxy" over here,—and the Treatment of Wounds to secure Union by First Intention.

I may say parenthetically that the mode of procedure was for some one, or more, who had previously promised it, to read a paper upon the subject, and the discussion of those papers was taken up by the gentlemen appointed for that duty, whose names were printed upon the programme, and who were called in regular order by the president. And I may also say, right here, that every delegate was anxious to ascertain the exact position of "Listerism" in the convention. It was noticeable that early in the sessions when certain men, who shall be nameless, *seemed* to try to test the matter by initiating applause at every allusion to antiseptic surgery there was very little response. Mr. Lister himself was always and everywhere heartily received. But it required no great sagacity to see that the majority of surgeons were *reserved* in the matter. But more of this further on.

Spencer Wells read a paper. He took strong Listerian ground, and said that now he had given up drainage altogether, so great was his faith in antiseptic surgery. Several others, Volkmann especially, followed in a similar strain. Then Marion Sims arose, and while he declared for Listerism he advocated drainage, and reminded Mr. Wells of a case (ovariotomy), in which he assisted him in a bad operation,—bad on account of adhesions,—and the patient *almost* died, but at last nature opened the abdominal wound and discharged a large amount of fetid fluid, and immediately she recovered. Finally came Mr. Keith to close the discussion. Never in the history of surgery did a few modest words make such a recoil in the "currents of expectant thought" as his.

It has been said, and was repeated by Volkmann and Kuget, in this discussion, that intra-peritoneal surgery was the "touchstone of Listerism." Professor Keith has been quoted the world over, again and again, as not only a warm disciple of Lister, but as illustrating in his remarkable success in ovariotomy, *more than any other surgeon*, the value of the antiseptic, or rather, the Listerian method. No one can deny this.

So slowly were his few words uttered that I can almost repeat every one *verbatim*.

You can imagine the effect much better than I can describe it when he said that for several months past he had "abandoned the antiseptic treatment altogether." "True," he said, "I had eighty successive recoveries under Lister's method, and *stopping there* it would be a wonderful showing. *But out of the next twenty-five I lost seven.* One died of acute septicæmia, in spite of the most thorough antiseptic precaution; three of "unquestionable carbolic acid poisoning; one of renal hæmorrhage." He went on to say that out of the eighty consecutive cases (or rather he said it first) many came too near dying; that a large number got a high temperature—105°, 106°, 107° Fahrenheit—the evening following the operation, but he said, "they happened to pull through." He then said that since he had for four months past abandoned the antiseptic method, and relied upon perfect cleanliness, care in controlling hæmorrhage, and thorough drainage, his cases were giving him much less trouble, and he was getting more satisfactory results.

He now stopped for a few moments, hesitating, as he must have realized the importance of his words, knowing that the whole world—surgical—was lending a "listening ear" to his utterance. The silence was "audible." Then he raised his head, and looking his audience squarely in the face, he said, "Gentlemen, I have felt it my duty

to make these statements, for *they are true*," and took his seat. I shall not attempt to describe the applause, nor the effect of his statements. Professor Keith, by the way, told me privately that he almost died himself from using the carbolic acid so much. He got renal hæmorrhage and debility to an alarming degree. He said, moreover, that he never had great faith in it, and should not have continued its use so long—I mean the "Lister method"—but for the fact that so many eminent men were carried away with it; and if, after his remarkable series of cases, he had changed, and lost seven out of twenty-five, as he did, without Listerism, all the world—he himself—would have attributed the result to the change.

One thing is certain: Mr. Keith's statements, in connection with those of others *and his own experience*, put Mr. Lister in a very upleasant position; for he was put down on the programme to close the discussion on the treatment of wounds to secure union by first intention, which took place on Monday, 8th inst. Although four days had elapsed, he had no answer. To show how deeply he was impressed by all that had been said, he began his remarks, which were extemporaneous instead of written, as was expected, by saying that he never had admitted that abdominal surgery was the "touchstone of Listerism," and to the surprise and dismay of his followers went on to argue that, with the rapidity with which wounds of the peritoneum heal and the remarkable absorbing power of that membrane, and therefore its ability to take care of its exudates, he "doubted very much" whether, in the hands of a skillful, careful operator, it was not better to dispense with the antiseptic plan. I realize how important are the statements I am making, and lest some of your readers may think that they are open to criticism as to accuracy, I will say that I sat near enough to hear every syllable uttered, and I pledge my honor as a man and surgeon for the absolute accuracy of every statement, though I took few notes.

Then, seeming to realize the danger of admitting such wonderful absorbent qualities to the peritonæum, he went on to say that he had recently made some experiments that surprised him very much, which proved that serum or bloody serum was "a very poor soil for the development of germs from contract with air-dust, and that blood clots were still more sterile. Indeed, it was very difficult to make them grow or develop at all, unless diluted with water." By the way, he declared that he had witnessed free cell development in a blood clot.

And these remarkable facts, said he, "at once call in question the necessity of the spray."

He then went on to say that he was not yet ready to give up the spray, but if simple irrigation or lavation should prove as good, he would say, "*Fort mit dem spray;*" and he further said, "I am not at all sure but that before the next meeting, two years hence, I shall have abandoned the spray altogether." (His recent house surgeon says that he has lost all confidence in its utility.)

As to carbolic acid, he said, "I am forced to admit its unfortunate character." That was all; not a word about oil of eucalyptus or any other substitute. He kept referring again and again to abdominal surgery, but his manner showed to everybody that he was upset.

He gave no statistics, no large comparisons, as was expected by his disciples. He referred to the excellent results in two cases of recent operation, saying that "I could hardly believe I should have got such results without the antiseptic plan; I did not before I used it."

And this is the fault that the best surgeons here find with him. They are all ready and glad to give him or any other man credit for all he has really done, and they all admit that Mr. Lister has done much to improve surgery, especially German surgery. I need not explain. But they very properly say, "With his unprecedented opportunities, both in his host of followers, why don't he give us large and complete statistics? Instead, he only gives either isolated cases or a small group of successful ones, such as may be found under almost any plan." I quote one of London's most eminent and fair-minded men.

It was curious to watch the effect of the thing. I have alluded to the impression produced by Keith's remarks. As Lister was speaking, one of his ardent admirers—I mean an admirer of his mode of dressing; I am not discussing the man, who is an earnest hard-working, accomplished gentleman—turned to me, and said, I would never have believed Professor Lister would have admitted that." Another said, "Well, if Lister abandons the spray and carbolic acid giving us no substitute, where is 'Listerism?' We had drainage, we had animal ligatures, we had air-proof dressings, before." And so on. Every little group of surgeons was discussing the matter; those who had never accepted the Listerian method being quite as much surprised as its warmest adherents.

"Mein Gott!" said a German whom I did not know, "Lishtereism ist todt." "Fort dem Spray? Fort dem Acid Carbolique? Was giebts zu bleiben?"—*Boston Medical Journal.*

RELATION OF ULCERATED OS TO PREGNANCY.

Dr. J. H. Bennett, narrates this case in the *British Medical Journal, (Med. and Surg. Reporter)*:

I was applied to in February, by a Polish lady, "to bring on abortion." She was thirty-six years of age, the mother of several children, and had

nearly lost her life a year before, at Warsaw, from uncontrollable sickness and constant and profuse hemorrhage, during pregnancy. She had the best consulting advice to be obtained at Warsaw; and, after every ordinary means had been tried in vain, abortion was induced, at the end of the sixth month, to save her life, as she was rapidly sinking. She came south, partly to recruit. When she sent for me, she considered herself about three months gone, and had had bleeding for a month. Latterly, the loss had been hemorrhage, and she was becoming anæmic. There was constant sickness, and she was blanched and weak. All these facts were placed before me by her relatives, and my assistance demanded on the lines laid down by her previous Warsaw physicians. I refused to accede to the request until I had ascertained that such a course was imperatively necessary, demanding an examination. This was allowed; and I found a hypertrophied cervix, with fungoid bleeding ulceration. These lesions were treated as described. In a fortnight, the bleeding ceased entirely; in less than a month the sickness had ceased; and in two she was quite well and in a fair general health —five months gone in a then all but normal prenancy; the fœtus vigorous. She left me to go home, in this, state in April, and has since been happily confined of a live, healthy child. Her obstetric physicians at home were much surprised at the treatment of her case, and at the results.

The existence of inflammatory lesion of the cervix or uterus, at the time of parturition, does not give the accoucheur any particular clue for any special treatment; but it prepares him for accidents. He should know that he has a bad case in hand; that rigidity of the os; slow, painful labor; laceration of the cervix; hemorrhage, during or after parturition; adherent placenta; metritis; ovaritis; hemorrhagic; purulent; long-continued lochial discharges; in a word, a bad labor and a bad getting up may be expected, in the natural course of things.

Such woman often do well, however, for two or three weeks after their confinement, and then flag, and become weak, feverish, and ill. Six weeks or two months after their confinement, their uterine condition should be carefully investigated; and, if any disease exist, it should be treated and cured before they are restored to their ordinary duties, as I stated at the commencement of this essay. By always following this course, when actively engaged in midwifery practice, I shielded my patients from the illnesses which often follow confinements. In ordinary practice, I believe the accoucheur takes leave finally of his patients three weeks after the confinement, and hears no more about them.

Whitlow.—In a clinic on this painful affection by Mr. Christopher Heath, (*Medical Times and Gazette*, vol. i., 1881), he says that the subject is meagrely treated of in the text-books. If met with in the earliest stage, when the finger has just begun to redden and tingle, a twenty-grain solution of nitrate of silver, or the silver stick wetted and lightly pencilled over the affected part and a little beyond, checks it at once. When the whitlow is a little more severe,—that is, when pus forms about the nail or the tip of the finger,—the cuticle, which is insensitive, may be incised. Occasionally, however, when a foreign body has found its way beneath the nail, pus forms there and gives rise to excruciating agony from the tension beneath unyielding structures. Judicious cutting away of the nail will relieve this if near the margin; but if near to the base, it is much better to pare down to the nail with a sharp knife until the matter is let out than to resort to the unnecessary cruelty of removing the entire nail.

The third kind of whitlow is really an acute necrosis of the terminal phalanx, following periostitis and suppuration beneath the periosteum, just as it does in the case of a long bone. A very slight injury—the prick of a needle or a pin—may set it up. After some hours' uneasiness, the pain becomes acute and throbbing, and entirely prevents the patient sleeping. If timely relief is not given, pus will very slowly make its way to the surface of the finger, but never up the sheath of the tendons, and, when discharged, will leave the greatest part of the phalanx bare and dead behind it. A timely and free incision is the only mode of saving the phalanx, and cannot be resorted to too early; for, if no pus be present, the inflamed periosteum will still be divided with great relief to suffering. The finger should be held firmly on a table, and the surgeon, entering his knife just above the transverse interphalangeal mark in the skin, should cut boldly down to the bone in its whole length from base to apex. When, as so often happens, these cases have been treated domestically with "soap and sugar" and poulticing until the end of the finger is riddled with sinuses, there is nothing to be done except to extract the necrosed phalanx as soon as it is loose and to bring the finger into shape by careful water-dressing applied in strips. The base of the phalanx usually survives, giving a point of attachment to the tendons.

Inflammation of the skin and subcutaneous tissues may occur in any part of the finger. Incisions must here be made with care, so as not to open the theca or sheaths of the tendons, which then invariably slough, and the patient is left with a useless finger. For this reason incisions on each side of the finger are safer than one in the centre, that may unawares let out the tendons, which will look perfectly healthy at the moment, but soon become sodden and softened.

The synovial sheaths of the flexor tendons of the thumb are often, though not always, in direct communication with the synovial membrane of the

annular ligament of the wrist, and hence pus is rapidly conducted in this way up to and, if not relieved, into the forearm.

There is much difference in the importance of saving the different digits. The thumb must be saved at all hazards. The middle and ring fingers are comparatively unimportant, and, if stiff, are apt to be in the way. A stiff forefinger is better than none.

Viburnum Prunifolium in Uterine Diseases.—Dr. E. C. Mann (Boston *Medical and Surgical Journal*) gives the following in reference to the use of this remedy: As many cases of diseases of women occurring in connection with nervous diseases are annually treated here, I desire to call attention to my own investigations with this comparatively new medicine. It appears to me to act directly and specifically upon the special nerves of the uterus as a true nerve sedative. I have had several very violent cases of congestive and neuralgic forms of dysmenorrhœa being accompanied by epileptiform convulsions of a very severe type, and in each and every case I have seen almost magical relief following the use of the fluid extract of viburnum prunifolium. The case referred to, which was so severe that the intensity of the pain had worn out the unhappy sufferer and induced the epileptiform attacks, was completely cured in a few weeks by the combined use of the viburnum prunifolium and the use of the constant current of electricity, the positive pole being applied to the hypogastric region, and the negative pole, to which was attached a cup-shaped electrode, directly to the uterus. The galvanic current has a very powerful influence in suspending contractions of the uterus, and also is very efficacious, when used locally over the ovaries, in controlling ovarian neuralgia. Previous to my using viburnum prunifolium I had been accustomed to rely on valerianate of zinc and fluid extract of gelseminum, with the constant current of electricity, but since my first experience with the former drug I have used nothing else. Although I have not had occasion to use it in cases of threatened abortion, I should deem it worthy of use from its action on the ganglionic nerve of the uterus. I have failed to perceive any action on the general system, the whole force of the medicine appearing to be directed to the uterus and its system of nerves. When the pulse has been high, from nervous excitement, and the temperature centres in the brain have been temporarily paralyzed, allowing sudden rise in temperature, from nervous excitement, both pulse and temperature have fallen to the normal as the uterine pain has been relieved. It must be remembered, also, that my cases have been aggravated ones, many of my cases have been sent to Sunnyside on the verge of insanity. My conclusions, therefore, are, that in viburnum prunifolium we have a uterine sedative more powerful than any other in controlling dysmenorrhœa and uterine contractions, and that it probably acts by passing from the blood to the nerve centre, and is special in its effect upon the ganglionic nerves of the uterus.

Chrysophanic Acid in Psoriasis.—Chrysophanic acid has been used successfully for some time as a remedy for psoriasis. It is, perhaps, the best remedy we possess for that affection. Where, however, the skin affection is extensive, or the remedy too strong, it sometimes causes sickness and vomiting. It may be applied in combination with melted lard, or what is better, with vaseline, in the proportion of from 30 to 60 grains to the ounce. Dr. M. Charteris, of England, has been using the remedy, in combination with vaseline, with complete success in quite a number of cases. His article is published in the *Lancet* for July, 1881. In a case where the disease *(psoriaris)* extended over the whole body the usual formula of 1 to 8 of vaseline was found too strong; nausea and vomiting occurred, so that he was compelled to apply it of a much weaker strength, viz.: 1 to 16. During his experience he learned one singular fact, that where the disease was nearly equal on both sides, or was symmetrical, the application of chrysophanic acid and vaseline to one side of the body acted equally on both sides. He took patients, so afflicted, covered the arm and leg with close-fitting flannel, so that nothing could touch it, and made the application to the arm and leg of the opposite side. The covered limbs recovered from the affection nearly, if not altogther, as soon as those receiving the ointment.

Cases affected for months and years, and which had resisted all kinds of treatment, readily yielded to this plan in from 10 to 14 days.

It would appear from the disappearance of the affection on one side by the application of the remedy to the other, and also from the sickness it occasioned, that the acid is absorbed into the blood and acts as a constitutional as well as a local remedy. This fact explains the observations of Dr. R. Crocker, who applied the acid to one side of the body and turpentine to the other, and found the respective sides healed in about the same time. He concluded, therefore, that turpentine was as good a remedy for psoriasis as chrysophanic acid.

From the above experiments of Prof. Charteris, it is evident that the acid acts both locally and constitutionally, and that in Crocker's case the disease yielded to the constitutional effect of the acid, and not to the turpentine.—*Pittsburgh Medical Journal.*

The Treatment of Spermatorrhœa.—Dr. S. W. Gross, in his Practical Treatise on Impotence and Sterility, says: In all cases of seminal incontinence, with rare exceptions, the remedies

at the onset should be directed to overcoming the sensibility of the mucous membrane of the urethra, of the ejaculatory ducts, and of the seminal vesicles; to subduing the irritability of the muscles concerned in ejaculation; and to diminish the reflex excitability of the genito-spinal centre. Hence, they should be of a calming and sedative nature. By the ignorant and indiscriminate employment of strychnia, cantharides, phosphorus, damiana, and cold sitz baths or affusions during the stage of hyperæsthesia, much harm is done and the therapeutics of spermatorrhœa are brought into disrepute.

Premising the statement that tonic should follow the sedative plan of treatment, I will now give an outline of my view as to the best management of the varieties of the affection:

Under all circumstances thirty grains of bromide of potassium, along with about ten drops of the fluid extract of gelseminum (Bartholow), every eight hours, and one-sixtieth of a grain of sulphate of atropia (Rosenthal) on retiring, are worth all the other internal remedies combined. In anemic subjects the bromide may be administered at night and quinine and iron be exhibited during the day; but if the bromide be badly borne, it should be guarded (or its cumulative action must be prevented by promoting its excretion by the urine by combining it with a diuretic, as ten grains of nitrate or bitartrate of potassa (Rosenthal). This combination is far better than that with Fowler's solution, which is advised by Gowers and Bartholow), or it may be replaced by twenty grains of chloral. Not only does atropia diminish reflex mobility of the genito-spinal centre, but the recent researches of Kenchel, Heidenhain, and Stricker and Spiner show that it paralyzes the movements of the cells of the acinous glands and checks their secretion, so that it cannot be dispensed with.

Inoculation in "Charbon."—Monsieur Pasteur has lately accomplished a remarkable triumph as the result of a thoroughly scientific investigation into the cause of a disease which has occasioned much alarm among the stock-breeders of France. The disease is known by the name of "charbon," and has particularly attacked sheep, to such an extent that it is estimated to have caused injury to the amount of several million francs a year. M. Pasteur's investigation led him to the conclusion that the malady is communicated by infected grass. The grass, however, is only infected where animals that have died of the disease have been buried. In these spots worms, after having fed on the diseased carcass, rise through the soil to the surface collect round the roots of plants, are swallowed by the animals, and thus communicate to them the deadly virus. M. Pasteur has collected these worms. He separated the virus and fully examined it, ultimately obtaining it in all conditions, from the most harmless to the virulent state. He then set up the theory that by inoculation the animals might be protected from "charbon." These theories, conceived in the laboratory, discussed before the Academy of Medicine, and warmly combatted, have lately been tested by practical experiments. On May 5th, M. Rossignol's farm and sixty sheep were placed at M. Pasteur's disposal. Ten of these sheep were left untouched, in order that they might later on serve for a comparison. Of the remaining fifty, twenty-five were marked with a hole in their ears and inoculated, first time on May 5th, and the second on May 17th. On May 31st, none of the inoculated sheep had lost fat, or gaiety, or appetite. On May 31st, the fifty sheep were taken without distinction and inoculated with the strongest virus. M. Pasteur predicted that by June 2nd, the twenty-five sheep not inoculated would be dead, and that the inoculated animals would show no symptoms of sickness. On that date, therefore, a number of eminent spectators came together to witness the result. Things turned out as M. Pasteur had foretold. At 2 o'clock twenty-three of the sheep which had been inoculated were dead. At 3 o'clock died the twenty-fourth, and the twenty-fifth an hour later. The twenty-five inoculated animals were sound, and frolicked and gave signs of perfect health. Only one of the twenty-five inoculated animals had been feverish, but the fever had entirely disappeared. It was caused by the animal having designedly been inoculated with too strong a dose of the virus. The twenty-five carcasses were buried in a fixed spot, and on the infected grass which will grow over it experiments are to be made with the inoculated and non-inoculated sheep. But the experiment is complete for all practical purposes, and M. Pasteur has thus been able by the exercise of his remarkable scientific skill to confer on his country a benefit, the capital value of which is at once calculable, and would amount, no doubt, to some millions of pounds sterling.—*Chemist and Druggist.*

Treatment of Extra-uterine Pregnancy.—Dr. Lusk *(Boston Med. and Surg. Journal)* cites several cases of extra-uterine pregnancy in which faradization and galvanism have been effectually used.

In the larger number the faradic current was employed, and of these his own case was one. Faradization in extra-uterine pregnancy was first successfully used by Dr. J. G. Allen, who reported in 1872, two cases of recovery through its instrumentality. So far, since then, his method, faithfully carried out, has proved uniformly successful, has presented no drawbacks, and all the women are known, from private inquiry, to be enjoying good health at the present time; while of one hundred and fifty cases of tubal pregnancy collected by Henning only seventeen survived.

The transmission of the current through the ovum has thus been proved a safe and efficient means for destroying the life of the fœtus, during the first three months of its existence. The application consists in passing one pole into the rectum to the site of the ovum, and pressing the other upon a point in the abdominal walls situated from two to three inches above Poupart's ligament. The full force of the current of an ordinary one-cell battery should be employed for a period varying from five to ten minutes. The treatment should be continued for one or two weeks, until the shrinkage of the tumor leaves no doubt as to the efficacy of the treatment.

PROLAPSUS ANI.—R. Eichler, M.D., in *Western Lancet*, says: A boy five years of age came under my treatment, suffering from prolapsus ani of two years standing. The gut came out to the extent of two and a half inches after each passage. My treatment at first was of a routine kind—cold effusions, cauterizations with nitrate of silver, tincture of iron, etc. The bowel persisted in coming down at every passage. As a last resort, I tried an ergotine suppository.

R. Ergotine.....gr. ij
But. cocoa.....q. s.
M. Ft. Suppos.....no. j.

One after each passage.

The effect of the remedy has been magical, as after the use of a few of the suppositories, there has been no return of the condition, and the case is cured.

READY METHOD OF PREPARING FOMENTATIONS.—Take your flannel, folded to the required thickness and size, dampened quite perceptibly with water, but not enough to drip, and place it between the folds of a large newspaper, having the edges of the paper lap well over the cloth, so as to give no vent to the steam. Thus prepared, lay it on the heated surface of the stove or register, and in a moment steam is generated from the under surface and has permeated the whole cloth sufficiently to heat it to the required temperature. This method is often very convenient and efficient where there is no opportunity to heat much water at a time.—*Michigan Medical News.*

PHTHISIS is being treated now, with reported success, by the continuous inhalation of the vapor of carbolic acid. Lister's gauze is occasionally dipped in a solution of the acid and then inhaled from a constantly worn respirator. "It is fair to infer that the application to internal suppurating surfaces of an agent, which has been used in similar cases, externally, with such benefit, will be equally efficacious in checking the growth and develoment of morbific germs and thus allow tissues to be reconstructed."—*Brit. Med. Journal.*

NOCTURNAL INCONTINENCE OF CHILDREN.—Prof. S. D. Gross, of Philadelphia, advises:

℞—Strychniæ.....gr. j.
Pulv. cantharides.....grs. ij.
Morph. sulph.....grs. iss.
Ferri. pulv.....grs. xx.—M.

Mix: Make 40 or 50 pills or powders, *pro re nata.*

Sig.—One three times a day to a child ten years old.

This prescription will speedily relieve the irritability of the bladder, especially if conjoined with such means as a cold shower bath daily, the avoidance of irritant food and late suppers, the patient lying on the side or belly, and taking care to drink nothing for the few hours preceding sleep, and to empty the bladder on going to bed.—*Mich. Med. News.*

PROF. HUXLEY says: "The body resembles an army; each cell, a soldier; an organ, a brigade; the central nervous system headquarters, a field telegraph; the alimentary and circulating system, the commissariat, and in which losses are made good by recruits born in camp, and the life of the individual is a campaign, conducted successfully for a few years, but with certain defeat in the long run."

At a meeting of the American Neurological Association, in speaking of the administration of the bromides, Dr. W. A. Hammond said that of the salts he preferred the bromide of sodium, but had given of late bromine alone.

℞—Bromine, ℥ i
Aquæ, ℥ viii.—M.

S.—Teaspoonful, well diluted.

Dr. Jewell had used bromine with favorable results, and Dr. Seguin said that he considered that the efficient agent was the bromine, and not the potash or soda.

A DOCTOR who had continued his visits on a wealthy lady for an inordinate time after convalescence had set in, was somewhat surprised one day, at being told by the servant that madame could not see him that day as she was ill.

MR. LISTER, recently, in a case of fractured patella, laid open the joint with antiseptic precautions, evacuated the extravasated blood, and brought the fractured ends of the patella into apposition by a strong wire suture.

PROF. PAUL BERT has shown that just twice the quantity sufficient to produce anæsthesia, by any anæsthetic, will produce death.

THE CANADA LANCET.

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This Journal has the largest circulation of any Medical Journal in Canada.

PRESIDENT GARFIELD.

In our last issue we made some allusion to the illness of President Garfield, and to the probable result of the case. Since then our predictions have been verified by the sad ending of one whose life hung in the balance for eleven long and dreary weeks. The medical profession watched with intelligence, interest and sympathy, the varying course and symptoms of this now historical case, and many no doubt were forced to the same conclusion as ourselves as to the issue. Symptoms of pyæmia were manifest at a comparatively early period, and though the attending surgeons were slow to acknowledge it, they knew it to be the fact nevertheless. That pyæmia did exist, and was the principal factor in causing his death, was abundantly attested by the *post mortem* examination. The parotid, intra-abdominal, and renal abscesses demonstrated this only too well. The immediate cause of death, however, was the giving way of one of the mesenteric arteries, a circumstance which could not have been anticipated. Even if this accident had not occurred, it is not possible that life could have been prolonged many days, and recovery was out of the question. The autopsy, the official report of which we give below, was a surprise to many. The ball appears to have taken nearly a direct course and was found flattened, and completely encysted, two inches and a half to the left of the median line, below the pancreas and behind the peritoneum. In its course it had fractured the eleventh rib and also the anterior surface of the body of the first lumbar vertebra. What was supposed, during life, to have been the track of the bullet turned out to be a sinus leading to an abscess cavity extending downwards towards the right ilium. Even had a correct diagnosis in this respect been made during life, the result would still have been the same. Gunshot wounds of the spongy portions of bone, such as the vertebræ, are among the most fatal of accidents, and this case proved no exception to the rule. The following is the official bulletin of the autopsy issued by the attending surgeons:—

Present, — "Drs. Hamilton, Agnew, Bliss, Barnes, Woodward, Reyburn, Andrew H. Smith, of Elberon, and Acting Assistant-Surgeon D. S. Lamb, of the Army Medical Museum, Washington. The operation was performed by Dr. Lamb. It was found that the ball after fracturing the right eleventh rib had passed through the spinal column in front of the spinal canal, fracturing the body of the first lumbar vertebra, driving a number of small fragments of bone into the adjacent soft parts and lodging below the pancreas, about two inches and a half to the left of the spine and behind the peritoneum, where it had become completely encysted. The immediate cause of death was secondary hemorrhage from one of the mesenteric arteries adjoining the track of the ball, the blood rupturing the peritoneum, and nearly a pint of blood escaping into the abdominal cavity. This hemorrhage is believed to have been the cause of the severe pain in the lower part of the chest, complained of just before death. An abscess cavity six inches by four in dimensions was found in the vicinity of the gall bladder between the liver and transverse colon, which were strongly inter-adherent. It did not involve the substance of the liver, and no communication was found between it and the wound. A long suppurating channel extended from the external wound between the loin muscles and the right kidney almost to the right groin. This channel is now known to be due to the burrowing of the pus from the wound. It was supposed during life to be the track of the ball. On examination of the organs of the chest, evidence of severe bronchitis were found on both sides, with bronchopneumonia of the lower portions of the right lung, and—though to much less extent—of the left. The lungs contained no abscesses, and the heart no clots. The liver was enlarged and fatty, but

free from abscesses, nor were any found in any other organ except the left kidney, which contained near its surface a small abscess about a third of an inch in diameter. In reviewing the history of the case in connection with the autopsy, it is quite evident that different suppurating surfaces, and especially the fractured spongy tissues of the vertebra, furnish a sufficient explanation of the septic condition which existed. (Signed), D. W. Bliss, J. K. Barnes, J. J. Woodward, R. Reyburn, F. H. Hamilton, D. H. Agnew, A. H. Smith, D. S. Lamb."

There can be no doubt, in view of all the facts of the case, that the late President received all the aid which medical science and intelligent medical skill could give. The surgeons in attendance deserve the thanks of the Nation, and it is the manifest duty of the profession to uphold and defend them from any reproach which may be heaped upon them by the laity or dissaffected doctors. There is one circumstance, however, which the medical press and profession can hardly afford to pass over in silence. We refer to the reported unprofessional conduct of Dr. Bliss. After the wounding of the President, messengers were sent, as is usual in such cases, in all directions, for physicians. Dr. Townshend was first in attendance, and according to ordinary courtesy, and the code of ethics, should have had charge of the case until the family physician arrived. Dr. Purvis was the next to arrive, and after him Dr. Bliss, who at once assumed control of the case, and retained it until the arrival of Dr. Baxter, U. S. A., the President's family physician, who had been out of the city. On Dr. Baxter's return, he presented himself at the White House, where he met Dr. Bliss, whom he asked to take him to see the President. This Dr. Bliss refused to do, stating that he wanted to keep the President quiet. Dr. Baxter said he made the request as the President's physician, having attended him for years. To this Dr. Bliss replied: "I know your game, you wish to sneak up here and take the case out of my hands." Angry words followed, and Dr. Baxter recognizing the impropriety of making any disturbance in such a place, took up his hat and left the room. It is wholly unnecessary to comment upon the unprofessional and unbecoming conduct of Dr. Bliss. Such conduct is unworthy of any member of the profession, and carries with it its own condemnation.

MEDICAL FEES.

Of all subjects treated of, none should interest the medical profession more than the subject of medical fees. Most medical men in this, and we suppose in most countries of the world, have to rely upon the fees derived from their practice for the support of themselves and their families, and it is very much to be regretted that they are in many instances so poorly paid for their services. The reason for this state of affairs in general, is not difficult to apprehend. Medical men, as a rule, are themselves to blame, from the fact that they do not sufficiently appreciate the value of their services; they do not properly insist upon being paid suitable fees; and what is worse, they occasionally endeavour to detract from the value of each other's services. The acquisition of an unusual fee by some fortunate "medico" is the occasion for any amount of shoulder-shrugging, and an envious cry of "high charges." As a rule, the regulars get the "regular fees" and the big fees go to the quacks.

In respect of fees, there is a most striking contrast between members of the medical and legal profession. Who ever heard a legal gentleman crying out against "high charges" in respect of his brethren at the Bar? Neither as a rule, in this part of the country, at all events, can the profession complain against the lawyers or judges for not supporting their claims when necessity compels them to bring them before the Courts. One Judge in this city, to our own knowledge, requested the plaintiff to double the charges, which were rediculously low, and gave a verdict in his favor immediately.

The local medical attendants upon the late lamented President of the United States, are said, according to newspaper reports, to have charged the Government $100 per day, and Drs. Hamilton and Agnew, each $1,000 per day. These seem large fees, but not more, we venture to say, than would have been charged by any leading lawyer in some important suit in which the Government might be concerned. We trust that no medical man in the United States will be found mean enough to carp at the above fees paid to his medical brethren, but rather that he will congratulate himself and his confreres on the fact that the claims of the profession in the matter of fees have for once, at all events, had a proper recognition.

The medical fees in this city, and in fact in all parts of the country, are ridiculously low, and in view of the return of the country to prosperity, and the increase of wages to laboring men and salaries to public officers, it is a most opportune moment for the medical profession to institute a movement for an increase in the ordinary fees. We would urge this strongly upon the attention of our brethren, for depend upon it, if we do not put a proper estimate upon the value of our services the public never will. It only requires a little energy and activity on the part of the profession at the present moment to accomplish this most desirable reform, and we trust that no time may be lost.

Another matter occurs to us, which we think requires to be ventilated. We refer to the large amount of gratuitous work done by medical practitioners, especially in towns and cities. Every person, rich or poor, seems to think he has some claim upon the services of a medical man, and what a cry of inhumanity is raised against a physician if he refuses his services to the poor without a fee. Yet the baker is not blamed for refusing bread on the same conditions, or the butcher for refusing meat. The London *Lancet* in a recent number gives the following in reference to this subject :—"There is a very comfortable doctrine abroad, that doctors are at everybody's service in an emergency, and that they are bound to rise from their beds and go to a distant alley to save a life or ease a pain, without the least prospect of pay. But is such mercy to be shown only by doctors? Why does not the public share with doctors the cost and the credit of such service? It is society's duty, not that of any single profession, to see that no human creature, however poor, dies without medical aid. A country like this should make provision for the emergencies of its poor, and not throw the whole onus on the much enduring and little paid members of our profession."

Medical men are not only supposed to attend all the sick poor gratuitously, but they are also expected to give of their scanty earnings to charitable purposes. This is certainly asking too much —and we wonder that the overburdened profession does not cry out against such injustice. Medical practitioners are also taxed by the municipal authorities to the full extent of their income from practice, and in some cases, for more than they actually receive, and yet they are expected to treat the poor gratuitously. Of course this will continue as long as the profession is willing to submit to it; but we maintain that it is manifestly unjust and unfair, and the sooner it is rectified the better. We submit that the municipal authorities should either remit the taxes on the doctors' incomes from their practice, or pay for the medical treatment of their poor. The fact that the injustice of taking the medical man's services for nothing and taxing his scanty earnings, has been the custom for years is no reason for its longer continuance.

MEDICAL THERMOMETRY.

This subject has come to be regarded as one of very great importance, both in medical and surgical practice. The ordinary means of determining the temperature of the body are so very imperfect, that a considerable deviation may be present and escape observation. All abnormal temperatures denote the presence of disease, and in many cases the physician is greatly aided in his diagnosis and prognosis of a case by ascertaining the temperature of the body, and this, with the means at our command, may be determined with a nicety which is common to few other phenomena. The temperature of the body cannot be feigned or falsified, and its abnormality may decide the degree or danger of the attack. Relapses, complications, or transitions in the course of disease, may in this way be discovered before they could otherwise be recognized. It reveals the imminence of a fatal termination, or the impossibility of recovery. In surgery the application of the thermometer determines the practicability or possibility of an operation where there are grave doubts.

The variations of temperature, however, to be of any real practical value must be taken regularly night and morning. A single observation, while it may point out that a patient is very ill, is not by itself conclusive as to the kind of disease present. When we have extremes of temperature we know there is great danger. For example, temperatures below 96.5F. are *collapse* temperatures, 92. fatal collapse. Temperatures from 100 in the morning to 104 in the evening, are *febrile* temperatures, and temperatures from 104 in the morning to 107 in the evening are *hyperpyretic* temperatures, 107

and above indicating a fatal termination. Every medical practitioner is aware of the difficulty in diagnosing at an early stage between the different febrile diseases, and it is here that the thermometer comes largely to our aid. If the temperature is normal, or only slightly increased, pneumonia, scarlet fever, typhoid fever and small-pox are excluded; if the temperature is high at the outset, typhoid fever, influenza, and articular rheumatism are excluded, but pneumonia, pleurisy, intermittent and ephemeral fevers, the exanthemata, pyæmia, or meningitis, may be present. In the early days a high morning with a normal evening temperature would indicate intermittent fever, while a high febrile temperature the first or second day would exclude typhoid.

It would, however, be entirely a work of supererogation on our part, to urge upon the profession of to-day the value and utility of the thermometer in daily practice, and while this is no doubt universally recognized, it is of equal importance that these instruments of precision should be what the name implies. From the report of the Winchester Observatory of Yale College, it would appear that many of the thermometers in daily use by medical men are inaccurate. In June, 1880, a circular was issued from this bureau in which the subject was discussed, and an offer was made to the members of the profession in the United States and Canada to correct any clinical thermometer sent for the small sum of fifty cents. Many availed themselves of this offer, and the result has been that sixteen hundred and sixty-seven thermometers have been corrected and certificated since that date; among these fifty physicians' thermometers had errors exceeding a degree and a half. If thermometers are to be used at all in the practice of medicine, and we apprehend no one doubts their utility in certain cases, they should be as accurate as possible. Proper seasoning of the tubes used in the manufacture of thermometers, and more careful graduation, are the remedies proposed by the bureau, and manufacturers are recommended to send the tubes to the Observatory to remain under seal a year before being graduated, and some are already taking advantage of this suggestion. In the meantime, those who have thermometers that are not above suspicion, should lose no time in having their presumed errors rectified, by sending them to the Winchester Observatory, Yale College, New Haven, Conn.

Electricity and Bullet Wounds.—Since the autopsy in the case of President Garfield, there is curiosity manifested to know why the electricians failed to locate the fatal ball. Some seem to think that the failure to locate the bullet by the induction balance was caused by the experimenters trying to obtain results beyond the power of the instrument. With the ordinary induction balance, as invented by Prof. Hughes, the absence or presence of the smallest piece of metal is clearly indicated at short distances. When Prof. Bell tried the experiment in Washington the bullet was at too great a distance from the coils. The consequence was, that as the experimenters knew they could get only the faintest results, if any, from the presence of the bullet, they were led perhaps to accept imaginary differences in the sounds they heard. The error may have occurred in another way, namely, through the presence of some metallic substance (other than the looked for bullet), which was overlooked by the experimenters. Notwithstanding, however, the failure of the experiment in this instance, surgeons should not be deterred from repeating it in cases where it may prove useful. There is not the least doubt that when the conditions are favourable the induction balance will give effectual aid in treating gun-shot wounds. By using the instrument any bullet that is not very distant from the surface could probably be detected at once.

Specialists in Medicine.—Dr. Billings, in his address before the International Medical Congress in London, said:—"There must be specialties and specialists in medicine, and the results will be both good and evil; but the evils fall largely upon those specialists who have an insfficient general education, who attempt to construct the pyramid of their knowledge with the small end as a foundation. It has been said by Dr. Hodgen, that 'in medicine a specialist should be a skilled physician, and something more: but that he is often something else—and something less.' There is truth in this; truth which the young man will do well to consider with care before he begins to specialize his studies; but, on the other hand, it is also true that the great majority of men must limit their field of work very much and very clearly if they hope to achieve success. The tool must have an edge if it is to cut. It is by the labor of specialists that many of the

new channels for thought and research have been opened, and if the flood has sometimes seemed to spread too far, and to lose itself in shallow and sandy places, it has nevertheless tended to fertilize them in the end." The specialists are not only making the principal advances in science, but they are furnishing both strong incentives and valuable assistance towards the collection and preservation of medical literature and the formation of large public libraries.

Ophthalmology: Middlemore Fund Prize Essay.—The interest on the fund of £500 given in trust to the British Medical Association by Mr. Richard Middlemore of Birmingham, to found a prize for the best essay on Ophthalmology, having accumulated for three years, the Committee of Council now offer, in accordance with the terms of the trust deed, a prize of £50 for the best essay on the Scientific and Practical Value of Improvements in Ophthalmological Medicine and Surgery made or published during the past three years. The successful essay will be the property of the Association. Essays must be in English or accompanied by an English translation, and forwarded under cover, with a sealed envelope bearing the motto of the essay, and containing the name and address of the author, addressed to the General Secretary of the British Medical Association, 161A, Strand, London, and must be in his hands on or before May 31st, 1882.

Suit for Malpractice.—We regret to learn that Prof. McLean, of Ann Arbor, (formerly of Kingston, Ont.,) is about to be subjected to a suit for malpractice, the damages being laid at $20,000, in consequence of his failure in an operation for the relief of recto-vaginal fistula. In order to bring the parts properly together, the Dr. divided the perineal body. Union did not take place owing to the patient's ill-health, and there is now prolapsus of the uterus and rectum. Suits for malpractice are the opprobria of surgical practice, and both judges and juries too often fail to understand that surgeons cannot always overcome natural defects. The differences of opinion also among medical men, where, in many cases no difference should exist, often occasion a failure of justice. We trust, however, that Prof. McLean will be supported by the testimony of his professional brethren, and that the verdict will be in his favour.

Prize Essay.—The committee of selection appointed by the chairman of the section on Practical Medicine, Materia Medica and Physiology, at the recent meeting of the American Medical Association, have selected, and hereby announce, as the subject for the prize to be awarded in 1883, the following question:

What are the special modes of action, or therapeutic effects upon the human system, of water, quinia, and salicylic acid, when used as anti-pyretics in the treatment of disease? The essays must be founded on original experimental and clinical observations, and must be presented to the chairman of the committee of *award* on or before the first day of January, 1883—N. S. Davis, H. D. Holton, W. B. Ulrich, *Com. of Selection.*

Tinc. Ferri Mur. Improved.—The addition of half a drachm of citrate of potash to the drachm of tincture of iron improves the quality of the latter for internal administration, by removing the peculiar roughness of the iron and its unpleasantness in the mouth. The following formula will be found most suitable:

R—Tinc. Ferri Mur.....ʒij.
Potas. citrat.....ʒj.
Syr. Limonis .....ʒiss.
Aquæ ad.....ʒviii.—M.

Sig.—A tablespoonful three times a day.

It may also be combined with substances containing tannic acid, as gentian, &c., without decomposition.

Progress of Medical Science.—A little over a hundred years ago, Haller, in Göttingen, was professor of anatomy, botany, physiology, surgery, and obstetrics, and lecturer on medical jurisprudence. At the same time he was writing one review a week, and summing up existing medical science in his "Bibliotheca." To-day any one of these branches requires all the time of the most energetic and learned of our contemporaries. but, on the other hand, the well-educated medical graduate of to-day could give Haller valuable instruction in each of branches of which he was professor.

Marked C. O. D.—A doctor in Dayton, (Ohio *Med. Journal*) was recently attending a case of labor in the family of one of his patients who, though a very excellent man, is a little slow in the payment of his medical bills. Immediately after

the birth of the child the father nervously asked, "Doctor, is the baby marked"? Yes, quietly replied the doctor, "It is marked C.O.D." The hint was taken, and the bill for that baby promptly settled.

Fees worth having.—According to newspaper reports, the four surgeons in attendance on President Garfield, Bliss, Barnes, Woodward and Reyburn, charged the Government $4,200 each, or $100 each per day, for 42 days attendance. Dr. Agnew's bill for the same number of days for "consultations, operations and visits" was $32,600, and Dr. Hamilton for "visits and consultations," rendered a bill for a similar amount. The remaining 38 days will no doubt be charged at the same rate.

The Gilchrist Scholarship.—The Gilchrist Scholarship of this year has been won by Mr. Howard Murray, of New Glasgow, son of Dr. George Murray, formerly M.P.P. for Pictou. This is another honor for Pictou county and for Dalhousie College. Mr. Murray was for three years a student of Dalhousie, and stood first in each subject in all three sessions.

Milk Diet in Renal Dropsy.—M. Chautreuil, in the *Gaz. des Hopitaux*, May, 1881, records a number of cases of general dropsy with albuminuria occurring in the later months of pregnancy, which were relieved and uræmic eclampsia apparently prevented by milk diet. In cases in which there was swelling of the feet and legs with more or less general anasarca, and abundant albumen in the urine, milk diet persevered in for a short time had the effect of removing the anasarca and diminishing the quantity of albumen in the urine. In one case the quantity of albumen was greatly lessened and the patient did well throughout, while in her previous confinement she had a severe attack of puerperal eclampsia.

Appointments.—Dr. Whiteford of Winnipeg, and late of Ottawa, has been appointed chief medical officer of the Manitoba and South Western Railway.

Dr. Edward J. Kelly has been appointed assistant surgeon 41st Brockville Batallion *vice* A. Fowler, left limits.

Dr. Robert H. W. Powell has been appointed surgeon 43rd Ottawa and Carleton Batallion.

Dr. H. Augustus Wilson has been appointed Pathologist to the Presbyterian Hospital, Philadelphia, *vice* De Forest Willard, M.D., resigned.

Coroner.—Dr. Finlay McMillan, of Sheet Harbor, has been appointed coroner for the county of Halifax, N. S.

Books and Pamphlets.

A System of Surgery, Theoretical and Practical. In Treatises by various Authors. Edited by T. Holmes, M.A., Cantab., Surgeon and Lecturer on Surgery at St. George's Hospital. First American from second English Edition, thoroughly revised and much enlarged. By John H. Packard, A.M., M.D., Philadelphia. Assisted by a large corps of most eminent American Surgeons. In three volumes, with many illustrations. Philadelphia: Henry C. Lea's Son & Co. Toronto: Hart & Co.

The work before us is the first volume of this admirable work on surgery. The publishers have been able, by setting it in smaller type, to compress the original five volumes into three, which will be published during the present year. Vol. I. is devoted to general pathology, morbid processes, injuries in general, complications of injuries, and injuries of regions, and is illustrated with 245 wood-cuts and nine chromo-lithographs. Among the English contributors are John Simon, J. Burdon Sanderson, John Croft, W. S. Savory, Henry Lee, Sir James Paget, Timothy Holmes, and Geo. W. Callender. Among the American are John B. Roberts, Jas. Nevins Hyde, Samuel Ashurst, John H. Packard, J. S. Jewell, Roberts Bartholow, and John T. Hodgen. The matter added by the latter is enclosed in brackets. The English edition of Holmes' Surgery has long occupied a leading position in the surgical literature of the day. It therefore needs no words from us to commend it to the favorable consideration of the profession in Canada. It is a work that should be on the shelves of every medical man's library. It contains all the recent advances in this most important subject, and is fully abreast of the present state of surgical science. Each writer may be considered as a specialist in the subject upon which he has written, a circumstance which greatly enhances the value of the work. We cannot commend the work too highly. It will be sold only by subscription.

A Text-Book of Practical Medicine, with special reference to Physiology and Pathology. By Dr. Felix Von Niemeyer. Translated from the 8th German Edition, in two volumes. New York: D. Appleton & Co. Toronto: Willing & Williamson.

Niemeyer's Practice of Medicine has been extensively read by the profession in this country, and was, ten or twelve years ago, considered by many as the work *par excellence* in medicine, and one that might be placed side by side with Watson's Practice, the "Blackstone" of our schools in those days. The author died in 1871, and no new editions have been published until the present one, edited by Dr. Eugene Leitz, who has made extensive alterations and inserted a large amount of new matter, in order to bring the work abreast of the recent advances in Pathology. Those who have read the previous editions will be glad to learn that the work of the great teacher has again been placed in the front rank. Notwithstanding the large number of books on the practice of medicine, we have no doubt that this great work will make its way before the profession, and be again adopted as a standard work on the Practice of Medicine.

Atlas of Skin Diseases. By Louis A. Duhring, M.D. Parts VIII. and IX. concluding the series. Price $2.50 each. Philadelphia: J. B. Lippincott & Co., 1881. Toronto: Willing & Williamson.

These are the last two numbers of the series of this admirable Atlas, by Dr. Duhring. This work which is now completed, is an enterprise which both publishers and author have good reason to be proud of. The plates portray in living colors the forms of skin disease of most common occurrence, and the descriptive text is all that can be desired in connection with an atlas. We have in previous editions given expression to our appreciation of this interesting and instructive work, and trust that the author may reap the full reward of his arduous labors in connection with its preparation. We prize the work highly, and are having it handsomely bound.

A Treatise on Continued Fevers. By James C. Wilson, M.D., and J. M. Da Costa, M.D. New York: William Wood & Co. Toronto: Willing & Williamson.

The authors of this treatise, whilst engaged in their work of teaching, have evidently felt the want of a work to which they might refer their pupils in which the diseases treated of were described at greater fulness than is usual in text books, yet without the extreme elaborateness of Ziemssen or other cyclopœdic writers. After the introduction by Professor Da Costa, the work consists of eight chapters on simple continued fever, influenza, cerebro-spinal fever, enteric or typhoid, typhus, relapsing fever, and dengue. The volume bears in every page the impress of the care that has been expended on its execution, and is eminently calculated as a work of reference to both practitioner and student.

Wood's Physicians' Vade-Mecum and Visiting List. By H. C. Wood, M.D. Philadelphia: J. B. Lippincott & Co.

This is a most excellent physicians' visiting list. It is nicely bound in morocco, of convenient size, and contains much useful information. A new feature is the introduction of woodcuts, showing the motor points of nerves for the application of electricity. We commend it to the consideration of our readers.

The Pathology and Treatment of the Diarrhœa of Phthisis.—Dr. C. T. Williams has a series of articles upon this subject in the *Lancet*. —*N. Y. Record*. He divides the different diarrhœas of phthisis into three classes. The first includes those simply due to irritation or a catarrh of the intestines. The treatment consists simply in altering the dietary and ordering a few doses of alterative and purgative medicine, with some alkali to reduce the acidity. The second form is that arising from ulceration. The ulcers usually begin in the small intestine, near the illio-cæcal valve; as the ulceration progresses, however, the large intestine becomes most affected. The treatment of this form requires very careful attention. It resolves itself into three sets of measures: (*a*) Rest in bed with the administration of easily assimilable food, such as chicken-broth, beef and veal-tea, milk gruel, blanc-mange, always combined with *liquor pancreaticus*, after the methods described by Dr. Wm. Roberts. Koumis is also highly recommended. (*b*) Warm applications to the abdomen, in the form of linseed poultices, turpentine stupes, or hot-water fomentations, to reduce the pain and produce derivation to the skin. In severe pain small blisters are useful. (*c*) Internal medicines: bismuth and opium will answer in slight cases. The most powerful astringent is sulphate of copper in one-quarter or one-half grain doses. Of vegetable astringents tannic acid is the best, in four-grain doses. Indian ball is often efficacious. If the

ulcerations are largely in the colon, injections or suppositories are often needed. The ordinary enemata of lead and opium will sometimes answer, but in severe cases a pint or a pint and a half of linseed tea, combined with medicines, are needed. Linseed tea seems to be especially efficacious. The third form of diarrhœa is due to waxy degeneration of the intestinal wall. This is hard to deal with successfully. The waxy degeneration indicates a need for phosphates of potash. The diarrhœa can only be treated, as in other diarrhœas, by the use of astringents.

Abernethy on Table-Hygiene.—There are still, we believe, some apostles of rapid eating amon gthe doctors in this country. We commend to their attention the following interview (from "Sam Slick"), which is worth a hundred lectures: "The Honourable Allen Gobble was dyspeptic, so he goes to Abernethy for advice. 'What's the matter with you?' says the doctor. 'Why,' says Alden, 'I presume I have the dyspepsy.' 'Ah!' says he, 'a Yankee, swallowed more dollars than you can digest.' 'I am an American citizen,' says Alden, with great dignity; 'I am secretary to our Legation at the Court of St. James.' 'The devil you are!' says Abernethy; 'then you'll soon get rid of your dyspepsia.' 'I don't see that inference,' said Alden. 'But I tell you it does follow,' says the doctor, 'for in the company you'll have to keep you'll have to eat like a Christian.' It was an everlasting pity Alden contradicted him, for he broke out like one moon-distracted mad: 'I'll be d—d,' says he, 'if ever I saw a Yankee that didn't bolt his food whole like a boa constrictor. How the devil can you expect to digest food that you neither take the trouble to dissect nor time to masticate? It's no wonder you lose your teeth, for you never use them; nor your digestion, for you overload it; nor your saliva, for you expend it upon the carpets. You Yankees load your stomachs as a Devonshire man does his cart, as full as it can hold and as fast as he can pitch it in with a fork, and drive off. And then you complain that such a load is too heavy for you.'"—*Med. Record.*

Deaths from Ether.—Dr. John B. Roberts (New York Medical Record, July 2, 1881,) is inclined to think that the failure of respiration is not always the first sign of danger of death from ether, but that the heart may begin to fail seriously while respiration continues active. He thinks that the pulse ought to be watched more closely than it usually is, that in some cases the urine ought to be examined as well as the heart and lungs, and that the person who is entrusted with the ether administration should be the most skilful of all the assistants. Dr. Roberts has collected twenty cases of death from ether that have been reported since January, 1872. There is great prejudice in the United States in favor of the harmlessness of ether that pains-taking researches of this kind are needed to overcome.—*Chicago Medical Review.*

Medullary Cancer of the Pylorus.—Dr. Thomas C. Smith, of Washington, D.C., sends us the history of a case of the above, in which there was no pain or other symptom pointing to the disease during life. The anterior wall of the stomach was also affected, and a perforating ulcer formed at that point, which broke into an abscess in the sheath of the rectus muscle. This abscess communicated a pulsation from the abdominal aorta, which gave rise to the suspicion of the existence of an aneurism at that point.—*Medical Record.*

Asiatic Cholera.—Dr. DaCosta, of Philadelphia, has recently had under observation a case which presented all the symptoms which he, with his great experience, had learned to consider pathognomonic of Asiatic cholera, and he would have so pronounced the disease, were it not that the case was a sporadic one, no epidemic being prevalent anywhere in the United States or Europe. Several additional cases of the same kind have been reported by independent observers in Pennsylvania. Whether this be due to the epidemic tendency to the discovery of diseases which at times seizes the profession, or not, these cases should certainly lead the National Board of Health to keep a close watch on all vessels landing on the Pacific coast, as from them, if anywhere, this danger is to apprehended.

Four rules for the preparation of an article for a journal: 1. Have something to say; 2. Say it; 3. Stop as soon as you have said it; 4. Give the paper a proper title.—*Biltings.*

Births, Marriages and Deaths.

On the 14th ult., at St. Paul's Church, Woodstock, Ont., by the Rev. J. J. Hill, Rector, T. Millman, M.D., &c., second assistant physician, Asylum for the Insane, London, to Helen Dick, only daughter of John Craig, Esq., of Woodstock.

At Muskegon, Mich., on the 13th ult., Andrew Chapman, M.D., late of Ancaster, Ont., aged 24 years.

At Shelburne, N. S., on the 5th ult., John A. Purney, M.D., in the 38th year of his age.

At Liverpool, N. S., on the 15th of May, A Robertson, M.D., aged 34 years.

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Original Communications.

ALCOHOL AS AN ANTISEPTIC IN THE TREATMENT OF WOUNDS.—TRANSLATION.

BY JOSEPH WORKMAN, M.D., TORONTO.

In a number of *La Emulacion*, a medical periodical published at the city of Merida, in Yucatan, there appears a communication by Dr. J. R. Sauri, on the above subject, which seems to us deserving of particular attention, as we are not aware that in American or European surgical practice, recourse to alcohol as an antiseptic has obtained to any important extent, if indeed its efficiency has been at all appreciated by the great majority of surgeons.

Dr. Sauri informs his readers that he was led to the employment of alcohol in the treatment of severe and extensive wounds, from having realized its value in the healing of trivial ones, and from the unfortunate issue of nearly all cases of the former class in the General Hospital of Merida, the foul air of which, consequent on defect of space and very defective means of ventilation, had long distressed him. The following will best exhibit Dr. Sauri's views :—

"It will not appear strange, in view of the outline I have given (of the defects of the hospital) that purulent infection was so common in the establishment, and that up to 1878, the wounded and the subjects of operation, almost with certainty died, despite of all the precautions taken to avert purulent infection. Under these circumstances we were led to make trial of the treatment of large wounds by alcohol, as our principal antiseptic. Previous to this time we had limited the use of this agent to wounds of the scalp and to small wounds in various parts of the body. The number so treated, and the results obtained by this means, showed the value of the plan to be better than was obtained in practice, either in families or in the field.

We frequently receive into the hospital two classes of bad wounds :—"Those caused by machines armed with cutting blades, and those from crushing by loaded cars. The former come from the haciendas, and the patients are presented to us from six hours to forty after the accident, the knives of the machines, driven by steam, having cut off sometimes only the phalanges, but at other times the fore-arm and even the entire superior member, has been torn from its articulation with the trunk."

* * * * *

"Practice has showed to me," says Dr. S., further on, "that alcohol, in contact with denuded surfaces, produces at the moment a sensation of heat, which is succeeded presently by a certain transient intumescence. I have observed that under the influence of this agent, an inflammatory condition of the wounds does not take place, or it has been reduced to a minimum of intensity ; furthermore it promotes and facilitates cicatrization, opposing in many cases the formation of pus, or diminishing this secretion when it presents. This advantage, obtained in the treatment, might alone suffice to accredit it, since it almost certainly impedes the accidents of purulent putrid infection, which prove so fatal to patients. We speak not of it with magisterial authority ; we merely desire to express the fact that the clinical observations collected by us in the General Hospital, have served as the basis of our judgment, whether in the regular dressing of wounds, or in the carrying through of amputations in those cases which urgently called for this process.

"It is proper, however, to observe that in certain much bruised wounds, which cannot be regularly adjusted, or in those in which suppuration is presented, or is of a yellowish or orange color, and of viscid consistence, I abstain from the employment of alcohol. Experience has shown me that in these circumstances the tendency to purulent infection is very strong, and I therefore endeavour to avert it by other means, as in the following case :—

The fore-arm had been torn off in its middle third, and desiring to save the rest of the limb, I dressed the wound as well as possible, applying

alcohol of the strength 26° ; two days afterwards I was surprised by the appearance of a thick orange colored suppuration, because of which I substituted some powders of bark, charcoal and camphor in equal parts, with cleansings by decoctions of bark, and sulphate of quinine with iron inwardly. I was thus able to save the patient, who is now quite well.

As a rule, I prolong the treatment by alcohol some 12 or fifteen days, and then substitute cerate or glycerine; in some cases however, I have judged it advisable to continue the alcohol for a month, when its use was indicated by results, and the patient or the hospital could afford the expenditure, which is indeed large."

Dr. Sauri details three very instructive cases, treated by him with the alcoholic dressing, which we venture to present without curtailment.

" *Observation first.*—Cutting off of the fingers and division of the left cubito-carpal articulation. —Francisco G., a native, aged 14 years, having imprudently exposed his hand, whilst working on a machine armed with cutting blades, was seized on the left hand by the principal wheel, one of the blades of which cut off the four fingers, and the second blade divided the cubito-carpal articulation, leaving at the wrist only the connection with the radius. In spite of the indication presented on first sight, to amputate in the lower third of the fore-arm, I proposed to wait, and uniting as well as possible the displaced parts, and removing some splinters of bone, I applied over the wound a large covering of folds of lint wetted with alcohol of 22° strength, and kept in place by a bandage. This simple application, renewed daily, and constantly kept moist by the patient himself, proved sufficient not only to prevent all inflammatory traces in the wounds, or any general reaction, but also to secure rapid cicatrization, so that in 15 days they appeared covered with fleshy prominences, without suppuration, and at the end of 38 days he was well, and the hand was capable of some movements.

Observation second.—Fracture of the femur and tibia, sub-periosteal resection—José G. Colli, native of Cansacab, Yucatan, aged 30 years, unmarried, of good constitution, by occupation a car conductor, entered the hospital 22nd December, 1879.

Two days previously he fell under the wheels of a loaded car, and suffered a simple fracture of the femur in its middle part, and in addition a comminuted fracture complicated with a wound in the second third of the tibia on the same side ; the solution of continuity gave passage to the upper fragments of this bone and of the fibula, over an extent of two centimetres.

At the time of our examination the thigh was found tumefied, in consequence of which it was not possible to attempt reduction, and I merely ordered fomentations with the tincture of arnica and subacetate of lead, and inwardly 50 centigrammes of sulphate of quinine. The wound was simply treated.

On the following day I proceeded, with proper caution, to reduce the fracture, which was accomplished with much difficulty, on account of the conditions mentioned. I applied three splints and a bandage. As regarded the tibia, I extracted from the wound several splinters and adjusted various marginal bristlings which were causing strangulation of the tissues. The part was then washed with a strong decoction of bark, and covered with folds of lint wetted with alcohol of 21°.

On the subsequent days the state of the patient was satisfactory, due to the use of tonics, good alimentation, and the special care bestowed on him ; but his indocility in bed obliged me three times to renew coaptation of the fracture of the thigh, which became solid at the end of 20 days; but I could not prevent overriding of the broken ends, and a manifest contraction resulted.

In the meantime suppuration in the wound continued, and a month after the accident the extremities of the fractured bones appeared uncovered, in consequence of which, and there being no other medical indication which could prove remedial, we proceeded with the following surgical measures" :—

The writer then details the operation of resection and removal of necrosed portions of both bones, after which he states that " the wound, after being washed repeatedly with fresh water, was brought together with figure of eight sutures, and cleansing with decoctions of bark was ordered, with the treatment by alcohol before mentioned."

" I continued the use of internal tonics. The general state of the patient improved after the operation, so that in 20 days he was becoming fat,

and the solution of continuity, now sufficiently reduced, permitted us to see the extremity of the bone slightly necrosed; slight tractions with forceps brought away the diseased part, and the wound was very soon covered with granulations which brought about complete cicatrization.

On the 4th of April, two months and ten days after the operation, and three months and thirteen days from his entrance into the hospital, we discharged him in the following condition :—There was continuity of the tibia and fibula in their whole extent, without any difference in the length of the two legs, measured from the rotular tuberosity to the external malleolus. No spontaneous pain existed, nor did pressure produce any. The limb, regarded at length, showed an obvious shortening, due to the irregular union of the fragments of the femur, caused by the indocility of the patient, as before mentioned.

Observation third.—Josê Ruperto Us, native of Abalá, Yucatan, aged 18 years, of good constitution, a labourer; he was brought to the hospital on the night of the 20th September, 1879. From carelessness in attending a machine armed with cutting blades, his right hand was introduced into the wheel with blades, and the whole of the upper limb as far as the scapulo-humeral articulation was torn off, carrying away at the same time the external third of the clavicle and the acromion of the scapula. The textures torn, left however, a small portion of the skin of the anterior of the thorax, hanging on a level with the insertion of the pectoralis major.

On minutely examining this extensive wound, the axillary artery was seen at its origin, and a ligature of precaution was put on it; we then proceeded to adjust, as well as possible, the contused soft parts; the extensive wound was wetted with alcohol, and folds of lint moistened in alcohol were applied, and kept on by a bandage. Internally infusion of lime tree 120 and elixir of opium 2 parts to be taken, a tablespoonful every two hours. On the following day he was ordered, owing to febrile state, 50 centigrammes of sulph. quinine, and barley water ad libitum. The dressing with alcohol was continued, care being taken to keep constantly moistened with it the lint folds, and to change them every 24 hours. On the 6th day small portions of liquefied muscle and sphacelated skin began to come away, as well as small splinters. Wine of bark was ordered internally. On the 31st of the month, 40 days after his entrance, the parts were completely cicatrized, and he was discharged.

"As we have already stated, before the year 1878, almost all our hospital patients who underwent amputation, perished under purulent infection and other accidents; but to-day we have succeeded in reducing the mortality so notably that in the past year, in the General Hospital, of 14 cases of amputation, only two ended fatally, and six in private practice all did well. In the present year, up to this date, (June, 1881,) we have had six amputations, four of the upper and two of the lower extremities, and have not had to lament any misfortune.

It is true indeed, that we had procured some improvement in the hygienic conditions, but without doubt the treatment highly contributed to our success, and we do not hesitate to recommend it to our confreres in the art, as well as to the proprietors of haciendas, where the first treatment is generally in the hands of unscientific persons.

NOTE.—Should Dr. Sauris' antiseptic prove, on extensive trial, as efficient as it seems to have been in his hands, even in the unfavourable climate of Yucatan, and the wofully defective hospital of Merida, it must be accepted as a valuable substitute for the cumbrous system of Listerism. Certainly the third case, above given by Dr. Sauri, was one well fitted to serve as a crucial test of the conservative and curative powers of the remedy recommended by him, and the process of application is so simple that the merest tyro in surgery may not fear to have recourse to it. The manufacturers of alcohol may now feel some relief to their troubled consciences.

A CASE OF INTRA-CRANIAL TUMOUR.

BY WM. CANNIFF, M.D., M.R.C.S., ENG.

(Read before the Ontario Medical Association, June 2, '81.)

The case I am about to bring under the notice of this Association may not be regarded as one of extraordinary interest, but is, I think, of sufficient practical information to warrant me to ask your attention for a brief space of time. Indeed I venture to say my opinion is, that unique, and startling

relations which any one in active practice may select for the consideration of meetings like this, will not best serve to make this Association a success, and secure that mutual advantage which the promoters of it aim to secure for the profession of Ontario. I wish to say, moreover, that my object is not to throw light, but to obtain it; and after I have related the case and the result of the treatment which, I may say, has not been marked by anything unusual, I hope to hear from those present, remarks and suggestions of such a practical nature as to afford instruction for future guidance.

The patient of whom I am about to speak has been under treatment in the Toronto General Hospital since the 19th June, 1880, where he is still an inmate. His history, as supplied by himself, is briefly as follows: Aged 31, is a native of Ontario. Since the age of 15 his occupation has been chiefly chopping and hewing timber in the woods in winter, and acting as engineer in mills and factories in summer. Up to the period when he began to work he always had good health, except an attack of scarlet fever when quite young, in connection with which there was nothing particular. In the summer of 1871 he was laid up with typhoid fever, which was prevalent where he lived, and when recovering he suffered a relapse, which was complicated with inflammation of the lungs. He was confined altogether for three months. For a few months before the fever he felt pain in the back of the neck, and easily became tired. Three weeks before the attack he had contracted gonorrhœa. In the fall of '71 he went to the woods, and continued there at work all winter, in good health. The following spring he came to Toronto, with the view of joining the Mounted Police. He passed the medical inspection, but he, with a number of others, were not required to complete the number needed. He then took a situation as engineer in a steam paper mill, where he remained four and a half years. During that time he was troubled for a while with swelling and pain in the left knee. He noticed at the same time that the leg above and below the knee was smaller than the other. The pain in the knee was at times severe, and continued to trouble him for about two years, gradually getting worse, when he had to give up work. After resting some time the knee got well, and has remained so ever since. He next took a job to clear a field of stumps, and then a contract to build abutments for a bridge, meanwhile remaining quite well. In the autumn of '78 he went to Michigan and engaged in chopping and hewing timber. Towards the first of March he at times found himself dizzy, and if spoken to he could not reply. He "either forgot what he should say or could not get the words out." Would feel hot and a rush of blood to his head. Some days he would have to leave off work before night, but would return to it the next morning. This continued until the 9th April, when in the night he was taken with a fit while asleep. His brother, who was sleeping with him, told him afterward that he made a noise with his throat and that his body was stiff. A doctor, who was called, told him his liver was affected. After this he had great pain in his head, sometimes in the back, sometimes in both temples. He would frequently vomit, especially after eating. This continued for two weeks, when he began to get better, and in a week was out, and at the end of another week returned to work. From this time he continued working all the summer and following winter, having only an occasional headache. In the spring of 1880 he took a job to cut some ship timber, some distance from where he had been working. In going to the new place of labour he noticed a singing in his ears, and found he could not speak, except to say yes or no. If he tried to say more he would make a mistake. The next two days being Saturday and Sunday he felt all right. On the Monday he hewed timber all day; the next day, after working for three hours, he in a moment found he could not use his left arm, and that it had no feeling, but in about half an hour the arm recovered and he resumed work, and continued at it all day; but he had the singing in his ears, and discordant sounds seemed near by and intensified. The following day he had a slight return in the arm at about the same hour. He struggled to overcome the feeling in the arm, and worked on. At last, suddenly, the left arm was drawn up until the hand was at the shoulder, he then fell to the ground, the left leg having become paralyzed. He was carried to the house, while a greenish fluid oozed from his mouth. He afterwards had an indistinct recollection of what took place, but was unable to speak. In two hours' time he was able to walk, but his arm remained quite paralyzed. Gradually from day to day power returned to the arm; but to the present

day its usefulness has remained impaired. This attack, which occurred on the 12th April, 1880, was attended with nausea and vomiting. Similar fits occurred about once a week, and after each the arm for a time was completely powerless. Power of speech was usually lost, and he could not remember names. His condition improved somewhat during the month of May, but his arm was useless for work. On the 17th of June he found his way to the General Hospital. One other occurrence should be mentioned. In the month of February, 1880, while standing in the woods, a limb of dry cedar fell upon him, striking his shoulders and bending him forward to the ground. His head was not touched, and he continued his work. I should also say that about this time he noticed his left eye was affected—he saw double, and to see straight had to shut the left eye. Moreover, he felt the scalp sore to the touch in spots, with a little swelling.

When he came to the hospital he presented the appearance of a well-nourished young man, with a florid complexion. He had a dull look, and when spoken to answered in a hesitating manner, and his speech indicated partial paralysis of the muscles concerned in articulation. His memory was evidently defective. Nothing abnormal was found to exist in connection with the stomach, bowels, kidneys, or other abdominal organs. The action of the heart and lungs was natural. His appetite was not very good, but it had been generally very good, but not excessive. The eyes seemed very prominent, and the pupil of the left eye was widely dilated, nor would exposure to light affect it in the least degree. There was a slight contraction of the flexors of the left arm ; the hand was partially closed, and the fingers, especially the little one, firmly flexed. He complained of a dull, heavy pain in the occiput most of the time, and occasionally of sharp shooting pain in the temples. It was some days after his admission before he had a fit. He felt it coming on and laid down. He was convulsed in the left side of the body, but did not lose consciousness ; it lasted about fifteen minutes. He described the sensation of an approaching attack, as beginning in the fingers of the left hand, creeping up to the shoulder, and then passing down the side to the foot. Seven weeks later he had another fit, seemingly brought on by stooping over to pick up a child. He felt a rush to his head, tried to walk away but fell in convulsions on the left side. The attack was of short duration. Not long after he was sitting down, engaged painting a box. The room was close and hot, and he felt the approach of a fit. But he stood up and walked out of the room and upstairs, and it passed away. Two weeks later, on getting out of bed, he experienced a shaking feeling and an odd sensation on the left side of his face, and his tongue felt thick. This lasted only for a few minutes. The last attack approaching to a fit took place last October. But he still has periods of warning, especially when he hears a sudden noise. He described it as a pricking of the nerves, particularly in the arm ; and there is occasionally an involuntary winking of the eye. The pupil still remains dilated, but not so much as it was. The arm, as a whole, has mostly regained its power, but the fingers are not under the control of the will. He has been for some time employed in the hospital dispensary, which he keeps in order, and carries the medicine to the patients. He is sometimes forgetful, and gets puzzled. I omitted to mention that shortly after he came in, Dr. Reeve instrumentally examined his eyes and found well-marked optic neuritis of both eyes. Recently, Dr. Ryerson used the ophthalmoscope, and he reports : "I examined Cooper's eyes, but did not find any very definite changes. There is some pallor of the left optic disc, but it is not definitely atrophic. His vision is normal. There is diplopia above the horizontal line, indicating lesion of the third nerve."

With regard to the diagnosis : When he came under treatment, although there was much which seemed obscure and uncertain, there appeared sufficient evidence to warrant the opinion that the seat of the disease was at the base of the brain. Many of the symptoms indicated an intra-cranial tumor, or, perhaps, the remains of a blood-clot, or products of chronic inflammation. The possibility of an abscess at first was admitted. I have mentioned that he at one time had gonorrhœa, and he admitted having had it more than once, but I have failed to learn that he ever had syphilis. At first I was inclined to believe from his statements that he had contracted the disease ; but the restoration of his memory and clearer statements from him do not support the view of syphilization. While many of the attacks had apparently been excited by what he called a rush of blood to the head, or congestion of the brain, it was apparent that there existed a

permanent predisposing cause of the repeated explosions. Respecting congestion of the brain, it may be well here to refer to the lectures recently delivered by Dr. Moxon, before the Royal College of Physicians, "On the Influence of the Circulation on the Nervous System." In these lectures, Dr. Moxon clearly shows that any important increase of blood in the brain is impossible at any time, even when the face and scalp are suffused; but on the contrary, that in those cases where it is commonly believed that congestion exists, the brain is deprived of the normal quantity of blood. A few of the symptoms brought to mind that form of convulsive movement known of late as "Jacksonian Epilepsy," in which the spasms are limited to one side of the body, beginning in one limb and spreading to the whole of that side. This, Dr. Hughlings Jackson regarded as irritation of motor convolutions functionally related to the corpus striatum. But the same careful observer has pointed out the connection between unilateral fits with double optic neuritis and new growths involving the brain. And Dr. Bramwell, of Edinburgh, says that it is a most important practical fact to remember, that double optic neuritis is the most important of all symptoms of intra-cranial tumor, while headache is second in importance, and nausea third.

As to treatment: Absolute rest of body and mind was for some time strictly enjoined, and when he, from time to time, undertook to do anything, the warning symptoms clearly showed how necessary it was for him to have complete rest. At first he had only bromide of potassium, in doses of grs. xv., every six hours. After a few weeks, he had in addition iodide of potassium grs. v. per dose. On the 29th September the iodide was increased to grs. x. three times a day. October 22nd, proto-iodide of mercury was ordered, which in a week's time caused tenderness of the gums, when it was discontinued. The iodide and bromide were then resumed, grs. x. and xv., and these he has continued to take up to the present. In September a seton was introduced at the back of the neck, where blisters had previously been applied. He felt great relief from the seton, and it remained in for two months. In December, at his own request, another seton was placed in the neck, from which he again found great relief from pain in the head.

I omitted stating that the patient says he rarely takes alcoholic drinks, and never had been using them immediately before any of the attacks.

I may say that the iodide of potassium has been used with the view of promoting absorption of any adventitious material, whether specific or otherwise, and the proto-iodide likewise. I was led to employ the seton from experience acquired many years ago when house surgeon in a New York hospital, where in a number of instances of chronic brain affections, probably of a syphilitic nature, the use of the seton was followed by marked relief and ultimate recovery.

ON ABSCESS OF THE BRAIN, IN CONNECTION WITH DISEASE OF THE EAR.

BY G. S. RYERSON, M.D., L.R.C.P. & S., EDIN.,

LECTURER ON DISEASES OF THE EYE AND EAR, TRINITY MEDICAL COLLEGE, TORONTO.

(Read before the Ontario Medical Association, June 2, '81).

MR. PRESIDENT AND GENTLEMEN,—I propose in the following paper to point out the serious turn which common cases of aural disease may, and not infrequently do, take, and will relate a case which well illustrates the symptoms and course of this grave malady. I wish it also to serve as an argument in favor of more earnest and faithful study of ear diseases by our students, and I think I cannot better "point the moral and adorn the tale" than by reading to you the notes of the following case.

On April 1st, 1880, I was called to see Master C., æt. 3½ years, in consultation with Dr. Temple of this city. He had been attended for some time, as well as his mother, by another practitioner, and upon the death of the mother, the family called in further advice. It appears that the child had been complaining for some days of his ear, but not much attention had been paid to him, owing to the apparently more serious condition of the mother. Upon her death it was found that the boy was very ill, and when called in, I found the following state of things: The child was pale and wasted. He lay in a state of coma, with ptosis of the right eyelid, divergent squint and dilatation of the pupils. He had been complaining of severe pain in the left ear for some days, in fact, screaming with the pain. He was recovering from scarlatina. Upon examining the ear with a mirror, I found the left membrana tympani bulging to the greatest extent. The apex looked like a drop of fluid. I perforated it at once, and this was followed by the escape of a considerable quantity of bloody serum and by

great relief of the symptoms. Respirations became slower, pulse 120, temp. 106°. Next morning the patient was conscious. No pus had escaped from the ear as yet, only bloody serum. Pain in the head much less.

On April 5th, discharge had become purulent. He complained of pains in his arms and legs. These continued to annoy him a good deal during the remainder of his illness. The child was much worse on April 8th. Pain in mastoid with tenderness on pressure, the veins over it being enlarged. Has intense pain in the head. The frontal vein stands out like a cord on his forehead. We decided in consultation to trephine the mastoid, which I accordingly did. No pus escaped, but a brownish, grumous fluid. The periosteum was found detached and discolored. This procedure gave great relief for some hours. He sat up and eat some oranges. Next morning, was much better. He had slept well. Ptosis almost gone. He has little or no pain in the head. Profuse offensive discharge from the ear; no fever; skin cool and moist. He is quite sensible.

On the 10th, he complained that he could not see his nurse properly. The pupils are dilated, but contract somewhat with strong light. With the ophthalmoscope, both optic discs are found to be greatly swollen, the margins indistinct and "woolly"; veins greatly enlarged and tortuous; arteries tortuous and buried in the swollen tissue. From this time I felt no further doubt as to the presence of a cerebral abscess and of the ultimate termination of the case. I opened a small abscess on the arm and on left auricle.

The night of the 12th was a bad one. He screamed almost all night. Discharge from ear lessened; somewhat feverish; he was delirious during the night; has a small abscess on his back; pain in the right knee. On April 21st he had severe rigors. His neck was much swollen at about the centre of the sterno-mastoid muscle. I could detect no fluctuation. The child died about 11 p.m. on the 22nd.

Next day, with Dr. Temple, I made a post mortem examination of the head. The dura mater was found much thickened and adherent to the calvarium; on its division, much clear serum escaped. The brain, which was very fine and large, was very much congested, more on the left hemisphere; the ventricles were full of serum. Beneath the pia mater, over each superior lobe, was a small collection of degenerated pus. Extensive caries of the roof of the tympanum and sulcus lateralis was found. A pair of closed forceps could be passed from the mastoid perforation directly through the sulcus lateralis. Hence it is probable that the trephination relieved the brain directly. The lateral sinus was full of clots and pus. The dura mater was extensively detached, and beneath it much pus was found.

This case is especially remarkable, for two reasons, viz.: (1). As an example of abscess on the brain following *acute* inflammation of the ear. (2). By reason of the remoteness of the collections of pus in the brain from the ear. Abscess of the brain from aural disease most frequently follows chronic discharge which has lasted for years.; as following acute otitis, it is very rare. Toynbee mentions one case, and St. John Roosa, in a table of 40 cases, another.

The abscess is usually found in the middle lobe of the brain, but is also met with in the pons varolii, and cerebellum occasionally. It may be separated by some considerable thickness of healthy brain tissue from the tympanum, but it is seldom found on the convexity, as in this case. It is probable that it was conveyed by the veins, as there was pus in the lateral sinus; and there were symptom of pyæmia, abscesses in various parts.

Ear disease is the commonest cause of abscess of the brain. Gull and Sutton, in "Reynold's System of Medicine," record it as the cause in 25 out of 76 cases, or about one-third. Lebert says, "one-fourth of all cases of abscess of brain are due to aural disease."

With regard to its relative frequency, George Field, of London, states that in 500 cases of perforation of the membrana tympani from all causes, he had four deaths from cerebral abscess, or about one per cent. of cases of disease with perforation.

A feature which was wanting in my case was epileptiform seizures. This is frequently the earliest symptom that arouses suspicion of serious disease, although its onset is often very insidious. Headache was well marked, the patient screaming, "my head, my head," as was also the nocturnal exacerbation of pain. The discharge is usually very offensive and often ceases or greatly diminishes suddenly. The occurrence of double optic neuritis was a diagnostic sign of great value.

Hughlings Jackson has ably pointed out the necessity of frequent ophthalmoscopic examination in all cases of obscure head disease. "Coarse" disease, *i.e.*, tumors, abscesses of brain, etc., is almost invariably accompanied by double optic neuritis.

The treatment is expectant. Ice to the head for pain; narcotics to obtain sleep, and complete quiet and rest are the main factors. An abscess may become encysted and remain stationary for an indefinite period.

A word of warning and of exhortation, and I have done. No case of chronic discharge from the ear should be considered as of no consequence. The periodical press teems with cases of abscess of the brain, in which it is incidentally noted that the "patient had discharge from the ears for years." No person is safe with a suppurating tympanum. It only requires a blow on the ear, or extra exposure to cold, and the business is settled. The English insurance companies fully recognise this, inasmuch as a man with chronic discharge is ineligible. Students should devote more attention to this important branch. They have plenty of opportunities and instructors now, and we will hear less of death from abscess of the brain from disease of the ear.

NOTES OF A CASE OF EMPYEMA.

BY H. P. YEOMANS, M.D., MOUNT FOREST, ONT.

(Read before the Ontario Medical Association, June 2, '81).

The case, of which I propose to give you a brief outline, presents no new features either in symptoms or in principles of treatment. My object in introducing it on the present occasion is to elicit the opinions and ascertain the experience of those who have encountered similar cases.

Feb. 7th. A farmer, æt. 45, who had always been healthy, of regular, industrious and temperate habits, complained of a pain in the right scapular region. Said he had felt a dull aching pain in this region for about a week, during which time he had been confined to the house. The greater part of the past two days had been spent in bed. There was a slight cough, so slight as to excite in his mind no apprehension of lung trouble—no pain while taking a long breath—felt weak and short of breath while making any exertion. For the past two months he has been more languid than usual, remaining in bed late in the morning. Could only attend to light work about the barn. When I first visited him at his house I found him sitting in a chair; said he had no chills, but had been gradually getting worse. Pulse 100; temp. 100⅘.

Physical exploration of the chest indicated effusion in the right thoracic cavity, dullness and absence of vesicular murmur extending as high as the nipple.

Feb. 8th. Second visit. Felt much worse last night; perspired considerably and coughed frequently—a dry, short, irritating cough. I introduced a No. 2 aspirating needle (Dieulafoy's) between the 7th and 8th ribs, about two inches to the right of the inferior angle of the scapula, and drew off three pints of most offensive pus, greyish yellow color, and so exceedingly offensive as to be almost intolerable.

Feb. 9th. Came again, about same time as the day before, and found physical signs of effusion as great as ever. I then introduced the aspirator needle in the same place and obtained five pints of pus, quite as offensive as that procured at first.

Feb. 10th. Made an opening at the point where the aspirating needle had been previously introduced and inserted a drainage tube. I endeavored to treat it antiseptically now with the best means at my disposal in an emergency. The opening was made under carbolic spray, produced by an ordinary steam atomizer. The cavity of the chest was washed out with a carbolic acid solution of 1 in 20, to which a few drops of tincture of iodine had been added. A piece of lint soaked in glycerine and carbolic acid was applied immediately over the wound and the open end of the tube. Absorbent cotton, showered with the carbolic spray, was laid over this, and the whole chest encircled with several layers of cotton wool. After this I continued to wash out the chest every day and re-apply the dressing in precisely the same way each time. At each dressing the pus appeared lessening in quantity and becoming healthier and purer.

Feb. 17th. Little or no pus had appeared for two days previous. I withdrew the drainage tube and placed it in a bottle of carbolic acid solution. The tube appeared quite clean and free from offensive smell.

Feb. 18th. Inserted the tube again with the

intention of washing out the chest, and found a few drops appearing at the mouth of the tube. The temperature, which had been ranging from 99 to 102⅘, did not rise above 100 on the 18th. The pulse, which had been less than 100, rose to 120. No more pus appeared after washing the chest each day again, until the 21st, when a small quantity appeared to have passed out of the tube during the night previous.

Feb. 22nd. The pus had increased in quantity and was more offensive. The progress of the case was after this very unsatisfactory, continuing from bad to worse, notwithstanding all efforts to arrest the disease, until the patient became exhausted, and died March 13th. Nourishment and tonic treatment were continued from the first.

In looking over my notes in this case, I find that the temperature did not rise higher than 101⅘, from Feb. 7th to 25th. Each day the thermometer recorded irregular variations, sometimes higher in the morning and sometimes higher in the evening:—Feb. 7th to 18th, 98⅘ to 101⅘; Feb. 18th, 100; Feb. 19th to 23rd, 98⅘ to 99⅘.

Correspondence.

CARBOLIC ACID IN WHOOPING COUGH.

To the Editor of the CANADA LANCET.

SIR,—A few weeks ago I had several patients suffering with whooping-cough, and having administered the usual remedies without getting the least benefit, I commenced giving carbolic acid and glycerine, in small doses, repeated every hour. I am glad to say the results were very satisfactory. The paroxysms of coughing and the vomiting, which in some cases were very severe and frequent, were reduced almost to a minimum in less than twenty-four hours. For a child three years old I give the following:

℞. Acidi Carbolici.....grs. iv.
Glycerini.....ʒ iss.
Syr. Simp.....ʒ iv.
Aquæ ad.....ʒ ij.—M.

SIG.—A teaspoonful every hour.

Yours truly,

J. BAUGH, M.D.

London, October 4th, '81.

Reports of Societies.

NEWCASTLE AND TRENT, QUINTE AND CATARAQUI MEDICAL ASSOCIATIONS.

A joint meeting of the Newcastle and Trent, and Quinte and Cataraqui Medical Associations was held in Napanee on the 5th ult. The following medical gentlemen were present:—Drs. Platt, Wright, and Evans, jr., Picton; Drs. Burdett and Eakins, Belleville; Dr. Bowerman, Bloomfield (secretary); Dr. Hamilton, Port Hope (secretary); Dr. Beeman, Centreville; Drs. Metcalf (medical superintendent, Rockwood), Lavell, C. H. Lavell, M. Oliver, and Henderson, Kingston; Drs. Beeman and Meacham, Odessa; Dr. Knight, Tamworth; Drs. Ruttan, Bristol, Leonard, Ward, Clark, Edwards, Brown, Napanee; Dr. Lavell, Newburgh; Dr. Riddel, Baltimore, and Drs. Day and McLellan, Trenton.

In the morning the Quinte and Cataraqui Association held a preliminary meeting and adopted a constitution.

The joint session was called to order by Dr. Lavell, who occupied the chair, and briefly stated the object of the meeting, and made certain explanations in regard to the constitution, powers, etc., of the Medical Council of Ontario.

Dr. Ruttan presented an interesting case of "Bright's disease," and a synopsis of the treatment adopted, which was followed by a general discussion.

Dr. Beeman, Centreville, read an excellent paper on the treatment of "Post Partum Hæmorrhage by the use of Hot Water." A lengthy and animated discussion followed, in which Drs. Lavell, Ruttan, Bristol and Platt took part.

Dr. Ward presented (with patient) an interesting case of "Torticollis," after which an adjournment was made for dinner, at which the Napanee members entertained the visitors at the Campbell House.

After dinner, business was resumed. In the absence of Dr. Lavell, Dr. Ruttan took the chair.

Dr. Hamilton, of Port Hope, read a concise but interesting and practical paper on "Epistaxis." This was followed by a discussion, in which Drs. Day, Ruttan and McLellan, of Trenton, and others joined.

Dr. Brown related the particulars of an interesting case of complete inversion of the uterus following labor.

The members of the two associations number about 200. The next meeting will be held in Belleville, on the first Wednesday in February next.

MICHIGAN STATE BOARD OF HEALTH.

The regular meeting of this Board was held at Lansing, July 12th, all the members being present. Hon. Le Roy Parker was elected president of the Board for the ensuing two years.

Dr. Jacokes, Kellogg and Avery reported an outbreak of small-pox at Pontiac, Battle Creek and other places, the disease being conveyed by immigrants.

A communication was received from the American public health association asking the influence of this board to secure legislation, making it a criminal offence for any person to communicate any communicable disease, such as small-pox, scarlet fever or venereal diseases, and giving to boards of health and health officials the same power in the prevention and suppression of other diseases as they now possess in cases of small-pox.

The secretary Dr. Baker presented a resolution of the American public health association, asking the Michigan board to use its influence to secure general vaccination.

The action of the sanitary conference, held at Chicago, June 29 to devise means to prevent the spread of small-pox, was endorsed, and resolutions were adopted requesting the national board of health to secure, if possible, the vaccination of immigrants before they land in this country; asking local boards of health in Michigan to secure a careful inspection of all immigrants entering and remaining within their jurisdiction, and a prompt vaccination or revaccination with pure and fresh bovine virus of all persons not protected against small-pox; and calling attention to the need of establishing a quarantine at Port Huron.

Dr. Lyster, committee on epidemics and other diseases, read a translation of two important papers recently published in France, on the "Causation of Certain Communicable Diseases," which gave details of successful methods of making viruses, which can be used in vaccination, and which are effective in preventing deaths from these diseases.

Dr. Baker mentioned a paper by Prof. Law of Cornell university, suggesting that these productive viruses all seemed to be made in accordance with a general law, namely, by their cultivation in fluids with access of free oxygen, and this gives us great hope of soon being able to make protective vaccination for many of the most dangerous diseases in animals and mankind.

Dr. Baker reported the investigation of an outbreak of a new disease in England, traced to the eating of American hams. The cause of the disease proved to be a virus, which was used to inoculate animals of various kinds and reproduced the same disease in them. From the accounts it seems probable that it is no more nor less than our hog cholera. The symptoms closely resemble in some respects the disease known last winter in this country as "winter cholera."

Dr. Jacokes referred to the Pontiac Sanitary association and the work it was doing for public health in that city.

Dr. Kellogg reported the formation of a Sanitary Association at Battle Creek, as a fruit of the recent Sanitary Convention held there by this Board.

Documents on the restriction and prevention of diphtheria; also on the best methods of disinfection, and the treatment of the drowned were ordered to be printed and distributed.

Dr. Baker was instructed to prepare a paper on the best methods of constructing hospitals for communicable diseases avoiding the use of the name "pest house."

Under the new appropriation made by the recent legislature, the board authorized the purchase of additional meteorological instruments for the use of the board's observers in different parts of the state.

The Secretary's report showed that the number of health officers appointed for the present year was 936. The compilation of the annual reports from these officers is now in progress.

The usual number of complaints have been received of sickness caused by flooding rivers, for the purpose of running logs in the northern part of the state. In answering these the secretary has used Mr. Parker's paper on the powers and duties of local boards of health.

The fee for examination in sanitary science was changed from $10 to $1, the latter sum being deemed sufficient to cover the actual expense. It was voted that applicants unable to be present at this meeting may be examined at the meeting of the Board, October 11th, 1881. Application to be made to the secretary at Lansing.

The secretary presented samples of notices of contagious and infectious diseases sent by the

health officers of Grand Rapids and Tecumseh to the superintendents of schools in those cities, and suggested that if the health officer of each city would send such notices to superintendents, it would be a very important health measure.

An account of an experimental boiler explosion, by D. T. Lawson was presented. His view is that they can be prevented by such a construction of the boiler as will stop the too rapid increase of steam under suddenly reduced pressure, as at starting the engine, or by the sudden introduction of cold water. Results thus far seem to demonstrate the correctness of his theory.

After auditing bills and accounts, etc., the Board adjourned.

GLENGARRY COUNTY MEDICAL SOCIETY.

The above Society held its quarterly meeting at Alexandria on Tuesday the 13th of September.

The president having taken the chair, the resignation of Dr. McDonell as secretary was presented, and accepted.

"It was then moved by Dr. Harkness, seconded by Dr. McDermid that Dr. Chisholm of Alexandria, be secretary in the place of Dr. McDonell. *Carried.*

Dr. McMillan reported a case of Vomiting of Pregnancy, in which minim doses of vin. ipecac succeeded after all other measures at his disposal had failed.

Dr. McDermid, Dunvegan, noted a case of "Double Placenta" occurring in his practice, his attention being drawn to the existence of a second by some membranes protruding from the vulva after the first placenta was removed. The cord was of unusual length and bifurcated within a few inches of the placentæ.

Dr. Munroe read the notes of a case of "Hemorrhage between the Amnion and Chorion," occurring about the third month of utero-gestation, causing great enlargement of the uterine tumor, and considerable difficulty of diagnosis.

Dr. Harkness mentioned a case which had been diagnosed as "Cancer of the Liver" which in a *post mortem* by himself and Dr. Falkner, proved to be cancer of the omentum displacing the liver.

TORONTO MEDICAL SOCIETY.

The Society met July 14th, the President in the chair. The minutes of the last meeting were read and approved. Dr. Sheard exhibited a specimen of aneurism of the abdominal aorta, also the heart from the same case, which weighed 19 ounces; it was hypertrophied and dilated, with vegetations on the aortic and mitral valves, and atheroma of the aortic arch. The patient from whom this specimen was taken was syphilitic, the kidneys were congested, and the liver nutmeg. The same gentleman also exhibited a portion of the lower end of a femur, which showed a spiculum of bone projecting from the internal condyloid ridge, just where the femoral artery passes into the popliteal space. There had also existed in the same case an aneurism of the popliteal artery, supposed to have been brought about by the artery having been punctured by the spiculum of bone.

The discussion of Dr. Graham's paper on Leucocythæmia was then taken up, which partook of a conversational form.

Dr. J. S. King was elected a member of the society.

Dr. Workman then read a paper upon "Animal Magnetism." He spoke of the functions the various nervous systems played in the hypnotized person. He gave the methods of inducing and relieving hypnotism, and spoke of its relation to hysteria. He mentioned some very interesting experiments, as performed by Charcot and others, and spoke of the effect of hypnotism upon the senses; its application to surgery in place of ether and chloroform was not successful. He also related some of the phenomena produced by suggestion in the hypnotized person.

Sept. 22nd.—The Society met at 8 p.m. the president in the chair. After the reading of the minutes, Dr. Sheard exhibited a liver in which there existed two large hydatid cysts, the right one the larger of the two, communicated with the duodenum. The patient, prior to her death had been passing hydatids by the bowels. In the same patient, in the region of the right ovary there existed an independent cyst, having no communication with the other cysts in the liver or any of the viscera. It contained hydatids in its interior.

Dr. Nevitt showed a fleshy mole; it was a perfect cast of the uterus, and consisted of fibrine. There was no muscular tissue in its composition.

Dr. Nevitt then read a paper upon "Pertussis." He related the history of the disease and the derivation of the name. He considered it one of

the most contagious and fatal of diseases, and referred to the early age at which the disease may occur. He referred to a case in his own practice where the disease showed itself shortly after birth. He thought there existed a distinct ratio between the prodromic stage of the disease and the disease itself. He gave instances where death occurred from complications. The treatment is by the administration of belladonna, chlorate of potash, chloral hydrate, and quinine, with the exhibition of inhalations and maintaining the strength.

Drs. Workman, Covernton, Canniff, and others, took part in the discussion upon the paper.

Dr. Oldright mentioned a case of atrophy of the scapular muscles, in which he ordered tonics and electricity; and also of incontinence of urine, where the administration of belladonna to its full effect had failed to prove serviceable.

Dr. Geo. Wright mentioned a case of chancre of the lip, in which the patient neglected the treatment ordered, and the secondary symptoms showed themselves.

Dr. Cameron referred to a case of lacerated wound of the face from the kick of a horse, also a saw wound of the hand, where primary union had taken place under the lead and spirit lotion dressing.

Dr. Macdonald mentioned a case of parturition in which there was complete rupture of the perineum extending into the rectum, which united without any surgical interference.

Selected Articles.

PRESIDENT GARFIELD'S WOUND.

[We give the following extract from an article on the surgery and pathology of President Garfield's wound, by Geo. F. Shrady, editor of the *Medical Record*:—]

The case of the late President Garfield has, from its purely surgical aspect, interested every member of the profession throughout the civilized world. Never before has a wound been studied with more care, from the meagre and unsatisfactory data heretofore obtainable, and never before has the accumulated experience of surgeons been more directly applied and more anxiously concentrated upon the welfare of any one patient. The reasons for this are too obvious to mention here.

Having had unusual opportunities for studying the case with Prof. Faneuil D. Weisse, of this city, we having been invited by Dr. W. Bliss to examine the morbid specimens in the Army Medical Museum, at Washington, it seems incumbent upon me that I should, from certain pathological and surgical standpoints, make a direct and unbiassed statement.

It cannot be expected that, under the circumstances, a detailed history of the President's case will be given. Such necessarily has been done by the surgeon in charge, who, by actual presence at the bedside, is the only one who can speak with authority concerning the symptoms presented. Nor would I presume at this time to add to the already extensive literature of the subject, were it not considered necessary to do so by the gentleman who so kindly gave me every facility for examination, and who has deemed it a duty which I owe to the profession.

It is proper that I should speak only concerning those points of which there is a direct knowledge on my part, and offer such impressions as are founded thereon.

It is well established by the autopsy that the ball entered four inches to the right of the median line in the tenth intercostal space, and passed forward and downward, impinging upon the 11th rib about three and one-half inches from the median line of the spinal column. The missile was then deflected to the left and downward, grazing the twelfth rib, which it fractured, and, continuing its course, entered the right side of the intervertebral fibro-cartilage between the twelfth dorsal and first lumbar vertebræ.

The ball then passed through the upper half of the body of the first lumbar vertebra, emerged on the antero-lateral face of the body of the same vertebra, half an inch to the left of the median line, thus throwing the track of the missile forward. Thence it passed behind the pancreas and lodged at the inferior border of the left external third of that organ. In its course behind the pancreas the ball wounded the trunk of the splenic artery. No vital organ was injured. The wound of the splenic artery gave rise to a traumatic aneurism which undoubtedly commenced to form immediately, and it was the final rupturing of this sac into the peritoneal cavity which, as is now well known, caused the death of the patient, and satisfactorily explained all the symptoms during the last hours of his life.

The ball was thoroughly encysted, and the portion of the track adjoining it, for a distance of an inch, was completely closed. The position of the blood-sac evidently accounted for both of these conditions. This aneurism, situated to the left of the spinal column, and between the latter and the ball, apparently pressed upon that portion of the track next the missile and closed it. At the same time, as can be easily understood, the sac-aneurism was thus placed in the direct track of the ball. This is certainly a very significant fact in connec-

tion with the probably fatal results in case any extensive exploration of the bullet-wound had been attempted. The aneurism was lined by concentric layers of fibrine which showed nature's efforts to obliterate the sac in the usual manner.

The evidences that the sac had not formed recently were made clear by a study of its pathological conditions. The opening in the splenic artery was on the superior and posterior aspect of its tortuous trunk directly in the track of the ball. The edges of this opening were sharply defined but were gradually bevelled to be incorporated with the walls of the attached blood-sac. This condition would indicate that the coats of the artery were cut completely through during the transit of the ball, and were not merely grazed and afterward opened by ulceration. It would thus appear that the aneurism was formed immediately after the injury and at that time attained its full size. Besides, the sac itself was evidently of long formation, as was shown not only by the firm condensation of its tissue and its intimate attachment to the edges of the cut in the artery but the number and apparent age of the concentric layers lining it. The burst portion of this sac was on its left anterior aspect, where not only its walls, but the different concentric layers were thinnest. The immediate invitation for this rupture was the degenerated condition of that portion of the sac, as indicated by progressive and destructive changes in its tissues. It is quite probable, as suggested by Dr. Bliss, that the blood escaping from this sac, did not at first find its way into the peritoneal cavity, but that there were distinct hemorrhages into the adjoining tissues, at stated intervals, until the blood ploughed its way forward and to the left, finally escaping into the peritoneal cavity. On this supposition, the occurrence of the intermittent pains in the side, likened by the patient to those of angina pectoris, is, as expressed by Dr. Bliss, very satisfactorily explained.

The body of the first lumbar vertebra presented the appearances of carious degeneration in the course of the wound, and, as far as could be judged by an examination of the dried specimen, the intervertebral cartilages above and below it were involved in the same necrotic process. The spinal canal was not involved in the injury. It was stated to me that the shattered eleventh rib had firmly united. This bone was unfortunately not preserved. The twelfth ribs were, however, intact, and had been removed along with the last dorsal, first, and second lumbar vertebræ. The broken portions of the right twelfth rib were firmly united by bone. As the liver had not been saved, the relations of the abscess to it and the surrounding parts were not demonstrable. It was stated, however, that the abscess was situated, as has already been described in the official autopsy, and that it was a closed sac of pus behind the peritoneum. Professor Weisse very ingeniously explained its presence there as a direct drainage in front of the right kidney from the lesion of the spine. This collection of pus at no time had, as far as could be learned, any direct connection with the external wound, although Dr. Bliss entertained such impression from the fact that at times a different character of pus was forced by pressure upon the abdominal walls from the orifice of the supposed track of the bullet.

In the following detailed history of this remarkable case, no significant symptoms were discoverable that would point to the injury of the spinal column as found at the autopsy, save the symmetrical involvement of the nerve-origins by the concussion of the ball. When the first bulletins announced that the President had been shot near the spine, and that there were attendant nerve-disturbances in the lower extremities, a natural and legitimate inference was an injury of some kind to the spinal cord. But when the nerve-symptoms in the lower extremities disappeared there was, for good reasons, a good diagnosis made.

As to the question of septic infection, about which so much has been said, it is well enough in this connection to recognize the fact that there are three principal grades or types of fever that follow the receipt of wounds. A mild form, known to all hospital surgeons, as *traumatic fever*. It occurs early in the history of the case, runs an acute course usually in a few days, and rarely occupies a week. Its phenomena are notably those connected with any high fever, and fatal results are not common. Then we have simple *septicæmia*, so-called, which is usually associated with the idea that some decomposing organic substance has found its way into the blood. In such cases the wound, if visible, exhibits an altered character. It is apt to be humid, swollen, and may be gangrenous. The fever is persistent, with corresponding rise in temperature. The pulse is constantly frequent, and more or less sweating is present. There are occasional attacks of mild shiverings, there may be vomiting, and often there is a profuse diarrhœa. At post-mortem examination there is nothing found which may be regarded as characteristic. The spleen is apt to be enlarged and softened, and so too the liver and kidneys. The blood also coagulates imperfectly. Exceptionally, in long-continued cases, there are said to be emboli in distant parts, with resultant abscesses. It is known to us in connection with dissection-wounds.

The third grade or type is what ia known among hospital surgeons as *pyæmia*. In reality, the term is an incorrect one, and should not be used. Much better would it be to designate the condition as one of metastatic septicæmia. It is characterized by intermittent rigors, in which the

temperature rises from three to five degrees, and then ascends still higher during the fever, but falls during the sweating, all of which phenomena follow one another much as in the case of ague.

These exacerbations have no periodicity as in ague. They occur at any time of day or night, at first often with long intervals, and then with short intermissions. The duration of the disease depends much on the nature of the accident, the strength of the patient, and the activity of the treatment. He may survive but a few days, or many months, in which latter case the disease may be classified as chronic.

Circumscribed abscesses are found in the internal organs; or, if the disease has been very acute, these abscesses may be diffuse. When such an affection is established, the pus becomes scanty, thin, and altered in color, or it may be arrested altogether for a time; wounds or abscesses show little tendency to heal; the skin is apt to be bathed in a peculiarly sticky sweat, and the breath has a characteristic sweet odor. Marked prostration follows each exacerbation, and the patient sinks to a lower level of vitality, in which attacks of delirium are not uncommon.

It remains to decide to which class the President's case belonged. It was evidently not a case of traumatic fever, nor could it be classed with the milder form, called simple septicæmia.

From a careful study of the symptoms in connection with the examination of the autopsical lesions, the conclusion seems inevitable that the case was one which, commencing as the milder form of septicæmia, gradually developed into the graver metastatic variety, or that generally understood as chronic pyæmia. It is apparent that the lines of distinction between the latter conditions cannot be clearly drawn in President Garfield's case; but it must be admitted that the weight of evidence is on the side of metastatic septicæmia, clinically and pathologically. In fact, it is safe to assert that the symptoms pointed so directly toward the existence of this condition, that it was a matter of great surprise that more metastatic abscesses were not discovered at the autopsy. The assumption in favor of metastatic septicæmia would be satisfactorily proved by the abscess of the kidney and the multiple abscesses in the parotid, which were within the capsules of the respective organs.

Knowing the facts, as demonstrated by the pathological lesions revealed in the President's case, each surgeon is qualified to judge as to the practicability of making extensive explorations of the wound, and as to the propriety of removing the ball by operation. It is well to consider at the start that the bullet, as such, had no immediate influence upon the progress of the case, and that the real causes of trouble were connected with the conditions of the track, viz., the broken ribs, the lesions of the spinal column, and the existence of the aneurismal sac. But if the exact location of the missile had been known, and under the supposition that its presence was a source of irritation, the necessary exploration had been made, the probe would have perforated the traumatic aneurism, and the almost instant death of the patient would have been the result. From the position of the wound and the attendant conditions through drainage at the inguinal region was impossible, and its employment as a means of treatment would, in all probability, have added an extra complication.

From my personal examinations of the pathological specimens, and as the result of an extended and careful study of the history of the case, with every opportunity for examination of details, I am convinced that the treatment of the President was judicious and skilful from the time he was first visited by the physicians in charge until his weary struggle for life was at an end.

TREATMENT FOR CERTAIN KINDS OF INCONTINENCE OF URINE IN WOMEN.

BY J. MILNE CHAPMAN, M.B., M.R.C.S.

Mrs. C., æt. 48, frequent and painful micturition, which had lasted 3½ years. When first ill a doctor told her she had inflammation of the bladder and some urethral affection (caruncle?), for both of which he treated her. Sept. 30, 1880, could only retain water half an hour. The pudenda were reddened, also the whole vagina. Urethra somewhat gaping at its outlet. There was considerable pain on rubbing the two walls of the bladder over one another, or on introducing the sound into the viscus. Urine turbid, acid, and contained pus cells, bladder epithelium, and some oxalates. Urethra was dilated by the finger, increasing the bladder's retaining limit to 1½ hours. Nux vomica and uva ursi were given and the vaginitis treated by sedative applications. Effects of the dilatation disappeared in about three weeks, it was then repeated, but soon she relapsed into former condition, minus, however, the pain, and pus in the urine. Urethra examined by endoscope and a slight redness noticed. Iodoform bougies were used. Condition of bladder wall, as seen by the endoscope was normal, and now (Nov. 8) every hour, day and night, she had to empty her bladder. Total quantity of urine 50 ozs., which gave little more than 2 ozs. at each micturition. Sound passed into the bladder 3 inches from external meatus, and could only be pushed half an inch farther, and thus pain was caused. It occurred to me that gradual forcible dilatation of bladder might relieve patient. The bladder was distended with warm 2% carbolic solution, and quantity used measured

4 ozs. Any attempt to inject more caused most intense pain, and the resistance was great as could be felt in compressing the ball of the syringe. From this date bladder was filled to distension daily, injection being stopped when pain became great and resistance reached a high point. The apparatus used was Higginson's syringe attached to an ordinary catheter, care being taken to prevent the access of air to bladder. Each day there was a gradual increase in the amount injected of from a drachm to an ounce. On two or three occasions the fluid as it returned was tinged with blood, but no harm ensued. Dec. 20 she was discharged. Instead of micturating every hour, she had only to get up once or twice during the night. Sixteen ounces could now be injected and less pain was caused than when four ounces was the limit. Two months later, well as when she left hospital.

It will be seen that the woman had a cystitis, with frequency of micturition, which latter remained after the former was cured; that any indication there was for further treatment was attended to either medicinally, topically or by operation, but that still the frequent micturition continued; that the bladder was then found smaller than normal, both by measurement with the sound and by the much more certain method of measuring its capacity, and that this capacity was increased fourfold by what may be called *slow operative dilatation of the bladder*, and that the results were in all respects satisfactory. There has this week presented itself at the Infirmary a case of cystitis, where the bladder capacity is three ounces, and we propose soon to begin dilatation.—*Edinburgh Med. Jour.* June.

VALUE OF EARLY AND REPEATED PARACENTESIS IN ASCITES DUE TO CIRRHOSIS OF LIVER.

BY W. A. DUNCAN, M.D.

Treatment of ascites due to cirrhosis of liver, by early and repeated tapping, does not receive the attention it deserves; nor is it advocated in standard medical works—with, however, two notable exceptions.

Mr. M., æt 46. Father died of cancer of the stomach, æt. 49; mother from bronchitis æt. 71; one sister of paralysis, æt. 48, and another of consumption, æt. 18. He had had measles, scarlet fever, and whooping cough. Went to sea when ten years old. Served in the Burmese war, where he received seven wounds; besides which, suffered from cholera, dysentery, and slight sunstroke. In 1854, went to the Crimea, and served all through the war, having ague and Crimean fever. In 1857, had another attack of sunstroke whilst in Bombay. In 1862, had a sharp attack of fever and ague. In 1874, he had another sunstroke; after which he left the sea. Had always been a very moderate drinker, taking on an average, one or two glasses of rum daily. He never had jaundice, piles, or morning sickness. In 1875, had an attack of pleurisy on the left side. During 1876 and 1877, he suffered intensely from neuralgia and sciatica, during which time he took from half a pint to one pint of brandy daily, to enable him to bear the pain.

Present illness began the early part of 1879, with a cough, morning sickness, anorexia, and general debility. About the end of March, he noticed that his belly began to swell; and, on making an examination, fluid was detected in peritoneal cavity. Liver-dulness extended from the sixth-rib to a little below the margin of the ribs. On the left side, the spleen extended down to the level of the umbilicus, and anteriorly to within an inch of the median line. Patient said his spleen had been large since the last attack of ague in 1862. The ascitic fluid gradually accumulated until May 3d, when paracentesis was performed with the usual trocar and canula, and seventeen pints of straw-coloured serum were removed. Previously to the operation, there had been no dyspnœa nor œdema of the legs, and but little discomfort. No bad result followed. May 14. Paracentesis was again performed; this time with Southey's trocar and canula. The fluid continued to flow for eight hours, and amounted to twenty pints. May 24 Was again tapped; and after six and a half hours, sixteen pints had escaped. The fluid did not reaccumulate so rapidly, and tapping was not again had recourse to until August 11, when, after seven hours, fifteen pints were removed. Sept. 11, he was again tapped; and only three pints removed. After the operation, a slight attack of peritonitis ensued, but soon subsided under morphia. Sept. 25, was again tapped, but only one pint was removed, as patient felt very faint. Oct. 3, eight pints were removed in five hours. Had severe pain in back; feet and legs puffy for the first time. Nov. 9, three pints were removed in four hours; 25, six pints in four and a half hours; and Dec. 6, six pints were removed with a large trocar. Much weakness followed, with some peritonitis and a troublesome cough. Some fluid was detected in both pleuræ. Feet and legs were much puffed. Dec. 21, four pints removed in nine hours; Jan. 2, 1880, ten pints in seven hours; 21, eighteen pints in seven and a half hours; Feb. 9, nine pints in eight hours. March 14, eight pints removed in four and a half hours; April 6, six pints in seven hours. April 24, tapping again required; but no result followed insertion of needle in the median line, probably because the peritonitis, which followed some of the previous tappings, had caused adhesions at this part. The needle was reinserted about midway between the median line and the anterior superior spine of the right illium, when eight pints were drawn off in six hours. From

this time patient began to improve. May 23, three pints removed in five hours. May 26, patient was out of bed, the first time for six months. June 6, three pints removed in four hours. July 31, was sent to the seaside, where he remained two months, and on his return was able to walk to my house and report himself. March 10, 1881, have seen patient and find him still improving; no reaccumulation of ascitic fluid, the only complaint being of troublesome constipation.

REMARKS.—The general treatment has been the absolute withdrawal of alcohol. At first purgative doses of compound jalap-powder, with diuretic pills of mercury, squills and digitalis were tried, but they had no effect on the ascites. After paracentesis was commenced, a saline aperient of the sulphates of soda and magnesia was given every morning, and occasionally ether mixtures, to relieve the flatulent distension, which was at times distressing.

After quoting from Aiken, Bristowe, Niemeyer, Frierichs, Thierfelder, the writer continues:

We see then, that these five eminent authorities consider that paracentesis should only be performed as a *dernier ressort*. The two exceptions to which I alluded are Dr. Murchison and Dr. Roberts.

Dr. Murchison says: "The operation when delayed until the last, is often followed by rapid sinking, with typhoid symptoms. . . . The advantages of early tapping are these. First, by removal of pressure, the establishment of collateral circulation through the more healthy portions of the liver itself, as well as the veins of the abdominal parietes is promoted. Secondly: the functions of important parts, which have been impaired or arrested by the pressure, are restored. Not only are the lungs relieved; but by the removal of pressure from the portal and renal veins, assimilation and the secretion of urine are increased. Thirdly: diuretic and other remedies, which, when the abdomen is full of fluid, have produced no effect, probably from not being absorbed, will often (after paracentesis) act powerfully, and thus retard or prevent the accumulation of fluid in the peritoneum. As soon, therefore, as the abdomen becomes moderately distended with fluid, I would recommend you to lose no time in having recourse to paracentesis. Even should the fluid reaccumulate repeatedly, you need not despair."

Lastly: Dr. Roberts, when speaking of the treatment of dropsy, says: "There is one class of cases in which paracentesis may not uncommonly be performed as a curative measure, as far as the ascites is concerned—namely, when it is dependent on cirrhosis of the liver. In such cases, I have for some years had recourse to repeated paracentesis, as a systematic method of treatment, the fluid being taken away again and again, should it reaccumulate, and the results have been most satisfactory—due care being, of course, exercised in the performance of the operation, and in the subsequent management."—*Brit. Med. Jour.*, June 4.

A METHOD OF CURING HYDROCELE WITHOUT CONFINEMENT OF THE PATIENT.

Dr. T. L. Ogier, of Charleston, S. C. gives the following in the *Am. Med. Bi-Weekly*. Whatever contributes to the relief and comfort of our patients, in however small a matter, and which has not yet come under the notice of the profession, is undoubtedly our duty to make known. Without, therefore claiming credit for a new operation, I will relate the following treatment for the cure of hydrocele.

On the 20th of April, 1864, without drawing off the water of the tumor, I injected, with a hypodermic syringe, about thirty drops of strong comp. tincture of iodine, thinking that the dilution of the iodine in the fluid of the hydrocele would stimulate the sac sufficiently and that the next day the water could be drawn off and the surfaces of the vaginal sac be thus allowed to come in contact. To my surprise, the next day, the hydrocele was not half the size, the fluid had been absorbed. Instead, therefore of drawing off the water, on the 23d I repeated the iodine injection, and on the 26th, though the swelling had been still more reduced, I again threw in the iodine. On the 30th, the fluid had disappeared, though the vaginal coverings and the testicle itself were thicker and hung down lower than on the side not implicated. He wore a suspensory bag from the third day after the first injection, and I directed him to continue to wear this, making it a little tighter than he had been wearing it. From the first injection, this patient experienced no pain or inconvenience and did not lose an hour from his work.

He had no return of his disease six months after the operation; the cure was therefore complete.

Encouraged by the success of this operation I have treated successfully eleven other cases, and my friend Dr. I. S. Mitchell, at my suggestion, has treated five cases with like success. I have not tried this in very old hydroceles. I doubt if it would succeed in such. In these cases I have first evacuated the water, and then injected ʒi strong tincture of iodine and left it in the sac, and applied a tight suspensory bandage; the pain and swelling have been severe, but the cures have been eventually good. If, then, this troublesome and not uncommon disease may be cured by the above simple operation, without the patient losing an hour from his ordinary business, as these cases would show, it would be an improvement in the surgical treatment of such cases to adopt this operation, instead of the old plan of tapping and injecting iodine, port wine, sulphate of zinc, etc.

AMPUTATION AT THE HIP-JOINT; NEW MEASURES TO CONTROL HEMORRHAGE.

(*Archiv fur Klinische Chirurgie*, Bd. 26, Heft. 4, Berlin).

In his paper, read before the Tenth Surgical Congress, at Berlin, April 9, 1881, Prof. Trendelenburg, of Rostock, referred to the danger of hemorrhage in amputation at the hip-joint, and the difficulty of controlling it. He ascribes the unfavourable results of this operation to the copious loss of blood more than to any other cause.

Esmarch's method cannot be relied upon in this operation. However high the constriction of the member is carried, it is still too low to permit the formation of flaps. Besides, it has a tendency to slip downwards. Compression of the abdominal aorta and the iliac artery is ineffective and not to be trusted in corpulent and unruly patients.

With the view of meeting this difficulty, Prof. Volkmann has introduced a new procedure which improves the chances of recovery, He constricts the limb as high up as possible by Esmarch's bandage, amputates, ligates all vessels, and then proceeds, by an external incision of the entire stump, to remove the remaining portion of the femur from the acetabulum and its muscular connections. Irrespective of the slipping downwards of Esmarch's constrictor, in high thigh amputations, this method leaves a very extensive wound, and eventually a very bulky stump; and these are material objections.

In order to obtain the greatest protection against loss of blood and avoid the objections to Volkmann's operation, Prof. Trendelenburg has adopted the following plan: Following Lisfrane's method, he transfixes the thigh in front of the joint with an arrow-like instrument. This is thirty-eight centimeters long, six millimeters wide and two millimeters in diameter, with its transverse surface oval in shape. The lance-shaped extremity is removable. The "arrow" enters the thigh at the hip-joint, and emerges at the fold of the scrotum, where the point is removed. An elastic band (or tube), held by the "arrow" is then applied in the form of the figure eight (8) in front of the thigh. This compresses the femoral vessels. The anterior flap is then made, and the vessels secured, and the elastic tube and the "arrow" removed. The latter is then inserted behind the joint, the band again applied, and the posterior flap formed in a similar way, after which the femur is disarticulated.

The author has not only tested this method in several cases with signal success, but he has also experimented on cadavers, a continuous stream of coloured liquid being injected into the abdominal aorta, and there was no loss of liquid.—*St. Louis Clin. Record.*

VOLKMANN'S SUBTROCHANTERIC OSTETOMY.

Early in August last I saw, in consultation with Drs. Henry, Gibbons, Jr., Whitwell and Rosenstirn, also a few days later, with Drs. Kivas and Ollino, Hugo L., a boy twelve years of age, who was affected with excessive deformity of the right hip, and excessive atrophy of the leg. According to information given by the parents, the child had first shown signs of suffering when six months of age; the pain came on suddenly on the right side of the pelvis, accompanied by swelling, the thigh being flexed upon the pelvis.

In spite of the best medical skill neither the progress of the disease was arrested nor its consequences averted. A deformity followed which prevented the child from standing alone until very late, and it never was able to walk without the aid of crutches or an apparatus to compensate for the great shortening. It is useless to enumerate the many attempts made to ameliorate this unfortunate condition. In 1874 the child was taken to Paris, and treated in the establishment of Dr. Duval, of Neuilly. Since then no treatment has been followed, care being only taken to provide proper apparatus as the child grew.

Photographs show the form of apparatus lately worn. While it acted as a sufficient support between the superior and middle third of the thigh, it would have been of little use in walking had the patient not been both light and active. The disproportionate development of the other leg showed that the patient used it almost entirely. At the consultation a posterior-superior-iliac dislocation of the femur was found, and the head of the bone could be felt distinctly. There was slight mobility. The upper border of the trochanter was found two and a half inches above the Roser-Nelaton line. The thigh was flexed at an angle of forty-five degrees, in a state of strong adduction, and with a slight degree of interior rotation. In the vertical position there was lordosis of the spine in the lumbar region, and lateral curvature towards the left, and a lifting up of the corresponding half of the pelvis. All these deformities were excessive and very apparent. When standing, the distance between the heel and the ground, with the foot at right angle with the leg, was five and a half inches; with the foot extended, the distance between the end of the toe and the ground was four and a half inches. There was therefore an exaggerated atrophy of the limb. On measuring from the upper border of the trochanter to the external malleolus, there was a difference between the two limbs of one and three-eighths inches. The knees could not be fully extended, and the child was unable to touch the floor with the toes. The apparatus which he wore rested upon the posterior part of the thigh, and

terminated in a steel foot. In order that the foot might rest flat in a shoe, an operation of tenotomy of the tendon Achilles had been performed by Dr. Duval, at Neuilly.

Although there was great deformity, I suggested the Volkmann operation, considering it the best, especially in regard to the future. This operation was accepted by all the consulting surgeons, and was performed on August 8th, 1881, in the presence of Drs. Gibbons, Whitwell, Rivas and Ollino. Chloroform was given by Dr. Ollino, and Mr. Pietro Rossi took charge of the spray and Lister's antiseptic dressing.

Having thoroughly disinfected the skin about the hip joint, a longitudinal incision of two and a half inches in length, was made from the upper edge of the great trochanter, on the posterior and exterior face of the thigh, down to and through the periosteum. This was then cut across, and with the raspatorium, it was detatched from the posterior and anterior part of the great trochanter; then with the chisel (as will be described), a cuneiform piece of bone was taken out, which had a base of about one square inch. This was taken from the posterior exterior portion of the femur, there being a strong flexion and only a slight adduction to correct. The division of the bone included three-fourths of its diameter; the remaining fourth was fractured without difficulty, and the leg easily straightened. The wound was washed, and closed by five stitches, after placing within it two short drainage tubes. Lister's dressing was then applied. Extension was made to the limb with a three pound weight at first, but within a week this was gradually increased to eight pounds. The pain was not severe, and ceased entirely after the first day; the temperature was but little above normal, except on the third day, when, from a stoppage in the drainage tube, it arose to 104°. The digestion was good, and the bowels regular. For the first three days the dressing was changed daily, and afterward only every two or three days; the stitches were removed on the seventh day, and both drainage tubes by the tenth. There was no local reaction, no suppuration, and the wound healed by first intention; an immovable silicate of potash bandage was applied on the thirtieth day. The result will be given in a later paper with photograph.—Dr. Devecchi, Turin.—*Western Lancet.*

TREATMENT OF CHOREA.

Dr. William Strange (*British Medical Journal*, vol. ii. 1881, p. 145,) says that the changes must be rung on the so-called nervine tonics, varying them according to the temperament of the child or to the collateral symptoms accompanying the choreic movements. If pallor, palpitations, and loss of weight exist, iron or arsenic, or both, will be necessary. If, on the contrary, the vascular system be sufficiently full and the mobile element prevail, then the bromides with ammonia, or the succus conii, will be of most avail. Frequently, whatever the condition of the vascular system and of the general nutrition, no good arrives until we have succeeded, by sedatives, in calming the excessive mobility of the nervous system. In these cases Dr. Strange has used the ice-bag to the spine and the ether spray to the nape of the neck, but not with much success. Direct calmatives—digitalis, belladonna, cannabis indica, with the bromides—answer the best.

The nervous symptoms once quieted, iron or arsenic may now be given, and carried to a somewhat higher degree. Some have recommended large doses of arsenic, ten to fifteen minims of Fowler's solution; but Dr. Strange has seldom found that the stomach will tolerate these large doses, and has contented himself with much smaller ones, in combination with iron or zinc.

But, whatever the remedy selected, it will be necessary to continue its administration until it has produced its special physiological effect. Especially is this necessary with the neurotic sedatives. Children bear large doses of belladonna and conium; and Dr. Strange has never found this class of remedies do much good until their full physiological effects (consistent with safety, have been produced.

Dr. Strange used some years ago to treat all his cases of chorea with wine alone, the port wine of the hospital, merely clearing out the primæ viæ, to make sure that trouble was not caused by entozoa or depraved alvine secretions. The amount given was three to six ounces daily, and all the cases got well. After suspending this treatment for some years, he has recently recommended it with good results.

HEPATOMY FOR HYDATIDS.

BY LAWSON TAIT, F.R.C.S.

The sixth case of this operation, which I have performed, like the others, has been remarkable for the speedy and complete recovery of the patient.

A. M. S., æt. 7, early in May last, suffering from severe symptoms due to a tumor on the right side, and above the level of the umbilicus, which was clearly cystic, and, in all probability, connected with the liver. It gave great pain, and I diagnosed it to be a hydatid tumor of the liver. The child had always been regarded as delicate. A year ago, her mother noticed that her motions were rather white-coloured. Swelling was noticed in abdomen about November last, and she complained of pain across the back and shoulders. December, 1880, there was a firm tumor just below the ensiform

cartilage, the dulness extending round the side. In February, there were some nodules on the surface of the liver; also tumor was more freely movable.

When admitted, had a tumor about the size of a fœtal head, which was extremely tender to the touch. The child was very sick, and appearance warranted interference. Opened the abdomen May 20, making an incision about three inches long, one inch and a half to the left of the umbilicus, the lower end corresponding to the umbilical level. When the cavity was opened, it was perfectly clear that the tumor was situated in the liver, and was a hydatid cyst. Removed from it, by means of an aspirator, about twenty-six ounces of clear fluid, containing a large number of scolices. Then enlarged the aperture in the liver to about one inch and a half, and secured its edges to the edges of the parietal wound by means of a continous suture, and fastened in a wide, soft, India-rubber drainage tube about six inches long. She went on perfectly well; severe symptoms immediately relieved, and May 26 the mother-cyst came away entire. Drainage-tube removed May 30; and June 2 she left with the wound quite healed, having gained greatly in weight, and having acquired a perfectly healthy appearance. No attempt was made to conduct the case upon Listerian principles, the only dressings used to the wound being red lotion and absorbent wool.—*British Med. Journal.*

TREATMENT OF COMPOUND FRACTURES AND WOUNDS OF JOINTS BY GLYCERINE AND CARBOLIC ACID.

I have thought an account of a few cases that I have treated with the glycerinum acidi carbolici of the British Pharm. without antiseptic spray or any very elaborate precautions, would be of general interest. And although the number of cases is not large, still the fact that they have all got well has produced a strong impression on my mind of the value of this mode of treatment.

A pipe manufacturer of intemperate habits, who had taken to fishing, was engaged in hauling in a net, when he got his leg caught, was thrown down, and found himself unable to rise. I found he had sustained a compound fracture of the tibia, at the junction of the lower and middle thirds, and had lost a large quantity of blood from a small wound caused by the upper fragment of the tibia having been driven through the skin. Bound it up temporarily, to arrest bleeding. After about twelve hours, when bleeding had quite stopped, the temporary dressing was removed, and a pad of lint soaked in collodion applied. This pad remained on two days, when it became partly detached, and free oozing of bloody fluid commenced from the wound. Now applied a pad of four thicknesses of lint saturated with glycerinum acidi carbolici to the wound, and a few turns of bandage over it, so as to keep it in proper position. The lint became firmly adherent to the wound, and the next day I applied a large pad of four thicknesses of lint soaked in the same way over the original pad, so as to keep it still saturated. On the third day afterwards I cut the edges of the two outer layers of the pad, next the wound, and removed and soaked them with glycerinum acidi carbolici, and then reapplied them, and then the bandage as before. I regard it of much importance not to disturb the layers of lint immediately covering and generally attached to the wound. After treatment had been continued about ten days, a large blister containing dark fluid formed under the pads and showed at their edges. I cautiously tried whether the under pad was still adherent, and finding it was not, I removed it and found that the wound had healed. Left the blister exposed to the air, and it dried up in a few days. The remaining progress of the case in no way differed from that of one of simple fracture, and the man ultimately completely recovered.

The next patient treated in this way was a boy about ten, with compound fracture of the tibia, the upper fragment of the bone having been driven through the skin. The glycerinum acidi carbolici was applied on four thicknesses of lint about two hours after the accident, and covered with cotton-wool, and fresh glycerine and acid was applied to the lint daily, without disturbing the layers next the wound. After about ten days the lint was removed, and the wound found to have healed. A speedy recovery followed. The fracture apparatus used was of the same kind as in the following case.

The next jumped out of a cart while his horse was running away. He sustained a simple fracture of the fibula and compound dislocation of the foot outwards, the lower extremity of the tibia being driven through the skin, the sock, and the elastic of his boot against the ground, and the internal malleolus broken off. When he had been conveyed home the bone was still protruding, and the foot could not be got at until his boot and sock had been cut away. The bone being covered with dirt from the road, was now carefully cleansed, and an attempt to reduce the dislocation was made. We did not, however, succeed in effecting the reduction until a slice of bone had been sawed off the projecting end of the tibia. After the reduction the limb was placed on an iron back splint, with two wooden side splints duly padded and suspended from a cradle, the apparatus being of the kind used at St. Bartholomew's Hospital. About three hours after I syringed out the ankle-joint with a solution of carbolic acid in 39 parts of recently boiled water, and then, after cleaning round the wound, applied a pad of lint of six or

eight thicknesses, saturated with glycerinum acidi carbolici, taking care that the upper layers were of sufficient size to project some little way beyond the wound, so as to exclude air effectually, in case of the patient becoming restless. This was then secured by a bandage. The next day all the upper layers of lint were removed, soaked as before, and then reapplied, except the three next the wound, which were left undisturbed. Then over the lint I put a large piece of carbolic acid plaster, and secured it with a bandage. This mode of dressing was repeated night and morning for several weeks, during the whole of which time not more than about a tablespoonful of discharge escaped from beneath the pad of lint. This discharge was of a pink color, opaque, and nearly solid. The bowels were confined, and pain and starting relieved with tincture of opium, for about a fortnight. After this the patient, who ate heartily his ordinary diet the whole time, used to sit up in bed and write letters, and keep accounts. After six weeks I gradually reduced the amount of carbolic acid by adding more glycerine, and when the wound was nearly healed used spermaceti ointment. He ultimately made a good recovery, and can walk considerable distances with the aid of two sticks.

The patient was a cabdriver, æt. 50. His horse fell down as he was driving, and while endeavoring to hold him up, he was pulled off his seat and broke his leg. I found a lacerated wound about three inches long, through which the end of the upper half of the tibia was protruding. After the fracture had been set, and the edges of the wound drawn together, except over the seat of fracture, where, in consequence of the swelling of the leg, the skin would not meet without more force being used than appeared desirable, a pad of lint of about four thicknesses was saturated with carbolic acid and glycerine, and lightly bandaged on. The fracture apparatus used consisted of an iron back-splint, with two wooden side-plints, padded and suspended from a cradle, as in the previous case. Over the pad a piece of carbolic acid plaster was placed. The next day a fresh pad of about four thicknesses was soaked as before mentioned, and applied over the previous one, and the plaster over them both. This dressing was repeated night and morning for about a fortnight, after which it was reduced to once a day. The man was on ordinary diet throughout, and there was no constitutional disturbance. About a month after the accident the lint next the wound was for the first time removed, and the wound found to have healed except over the end of the bone, where there was a wound about an inch long, with bare bone exposed. The special treatment was now discontinued and poultices were used. A little later a thin layer of bone came away, and the wound then soon healed, and the man recovered with a useful leg.

The next was a brewer's drayman, a large made and very fat man, accustomed to the free use of the beverage he supplied. His horses started off while he was in a public house, and when he ran to their heads he was knocked down, and the front wheel of the dray going over the inner side of his knee, turned back a large flap of skin, and made a lacerated wound that extended into the knee-joint. A surgeon was called, who dressed the wound, put in some stitches at suitable points. When I saw him a large pad of four thicknesses of lint, saturated with glycerinum acidi carbolici, was applied over the wound, and kept saturated by fresh supplies on its outer surface renewed daily. For a week or ten days all went well, and no trouble connected with the joint occurred afterwards, but at the end of that time the lint came off and poultices were used instead, the edges of the skin flap being found to be sloughing, and erysipelas of the leg commencing. The erysipelas followed a sévere course, as it did also in several other cases that occurred about the same time, but in the end he recovered and returned to his occupation as drayman.

The next fell from a scaffold 18 feet high, sustaining a severe compound fracture of the lower jaw, while another man falling upon him broke his thigh, and the bone coming through the skin, wounded the internal saphenous vein and caused such copious bleeding that the man appeared in danger of immediate death from loss of blood. A large sponge was bound tightly over the wound, and the bleeding thus arrested. The fracture was then set, a long splint and bandages being used in the ordinary way. The treatment having reached this stage when I first saw the man, who was cold, perspiring profusely, with livid face, and evidently almost dying from loss of blood, I applied the glycerinum acidi carbolici freely to the bandages over the sponge, and then lightly bound over them four thicknesses of lint saturated with it. The next day I removed the lint, cut slits at short intervals in the bandages, and injected the glycerine through them with a syringe and along the upper edge of the sponge, and then reapplied the pad of lint freshly saturated as before. This treatment was continued for a fortnight without disturbing the sponge, after which the wound was found to have healed. The man's health improved throughout, and he recovered in about the same time as if it had been a simple fracture of the thigh.—Dr. Griffin, in *London Lancet*, Sept.

Laceration of the Cervix Uteri.—In the *New York Medical Journal and Obstetrical Review* for September, 1881, Dr. Charles Carroll Lee, Surgeon to the New York State Woman's Hospital, indicates the proper limitations of Emmet's operation for laceration of the cervix uteri. Little heed, he remarks, was paid at first to Dr.

Emmet's suggestion of the pathological importance of lacerations of the cervix and of the desirability of treating them by operation in certain classes of cases; but, after Dr. Emmet had, on a subsequent occasion, more fully demonstrated his views, it soon came to pass that the operation of trachelorrhaphy was performed in the most trifling cases, and advised in conditions entirely unsuitable for it. Hence an unjust obloquy was thrown upon it, and in many European countries, England in particular, it is still regarded with disfavour. One of the immediate results that occasionally follow cervical laceration is *post-partum* hæmorrhage, and the author thinks it may fairly be questioned if the puzzling cases in which hæmorrhage goes on, in spite of firm uterine contraction, are not always of this nature. He gives full credit to Dr. Pallen for his observation and teaching in regard to this aspect of the matter, and then passes to a consideration of the conditions that demand the performance of the remote operation, together with those that contra-indicate it. In many cases of notable rents of the cervix there is no indication for operative interference. The obvious or ascertained pathological influence of the laceration—not its extent or size—should be our guide for its treatment. If it presents a cicatrized surface, and if there is no hyperplasia or inflammatory condition of either the neck or the body of the uterus, a surgical operation would be absurd, even though the rent were bilateral and had divided the cervix up to the vaginal insertion. If, on the contrary, the laceration is unilateral only, and comparatively small in area, but with a raw, unhealed surface, and associated with either cervical or corporeal metritis, it is absolutely certain that the inflammation will never get well until the laceration is cured, although the symptoms may be overcome for the time being. Still more pointedly may this be said of extreme cases of bilateral laceration with extensive eversion of the cervical canal, with or without cystic degeneration. A much more limited class of cases is that in which the laceration was healed, leaving the cervix tough and nodular, and the angles of the rent filled with cicatricial tissue, in which nerve filaments are often caught and compressed, causing excessive reflex irritation of the uterus and of the general nervous system. The test of such a case is the sudden pain, like a tooth-ache, which pressure with the finger in the angle of the tear generally gives. In such cases the operation is speedier and more thorough than other measures in destroying the "cicatricial plug," never having failed, in the author's experience, to yield a most satisfactory result. While thus warmly urging trachelorrhaphy in proper cases, Dr. Lee defines no less positively the conditions that forbid its performance. Parametritis is undoubtedly a bar to the operation; and yet, he adds, how often are we asked to operate or to sanction an operation while the pelvis is still half filled with an inflammatory deposit of lymph! Of the importance of pelvic peritonitis less need be said, partly because opinions differ as to whether this condition can be separated from parametritis, and partly because the objection raised in the former inflammation would lie equally in this case. As inflammatory fixation of the uterus is, however, peculiarly characteristic of pelvic peritonitis, its existence in any form should be deemed an insuperable barrier to the operation. Endometritis and acute trachelitis also contra-indicate it, as well as all conditions of extreme impairment of the general health, except such as may reasonably be presumed to depend upon the laceration itself, or upon the uterine disturbance that is kept up by it.

ANECDOTES OF SKODA.—The *Staatszeitung* quotes several anecdotes about Skoda, some of which are a good index to his character. One day he was invited to dine at Court. After having delivered his lectures and attended to his patients, he repaired thither in his customary well-worn, old-fashioned apparel. "But the Herr Professor might have appeared with a frock-coat," reproachfully intimated the official charged with the reception of the guests. "Well then," said Skoda, "I'll ride home and send my frock-coat here to dine." Upon another occasion, by Ministerial decree, certain changes were to be made in the hospital, the utility of which Skoda denied, in spite of the Burgomaster's opinion to the contrary. "Your Excellency," he said bluntly, "we physicians are the best judges of such things." The angry retort that the government was paying the money and intended exclusively to control it, was met by the argument that the funds belonged no more to the government than to the medical authorities, but that they were the property of the tax-paying multitude, who looked to the opinion of competent persons as to the disposal of them. Skoda, ever since his student days, was in the habit of attiring himself in exceedingly antiquated style. Decades passed by, but the cut of his "inexpressibles" remained the same, in spite of the bantering remarks of his friends. One day, however, to the great surprise and amusement of everyone, the great clinician appeared in an elegant pair of pantaloons, of faultless style. "As a student," he explained, "I lived with a tailor, who rendered me a good many services, and greatly assisted me, so I always remained his customer. The poor man is dead now, and *I*—have to wear fashionable pataloons." For a pain in the foot, Skoda employed a salve prescribed by a colleague. Questioned as to the result of the treatment, he remarked: "Where I applied your salve, the pain was arrested; but where I did not, *it ceased much sooner*."

Martin's Rubber Bandage in Ulcers.—A patient applied to me July 20 for treatment for a large varicose ulcer on the internal aspect of the right leg. On my proposing to apply a Martin's bandage, he demurred, on the ground that he had tried one formerly—that, owing to the confinement of the perspiration, his leg was in a constant water-bath, and the heat, itching, and pain were unendurable. I had before felt the force of this objection, and have no doubt but that this has been the greatest obstacle to the successful employment of this bandage in a large class of cases. It occurred to me that the desideratum—ventilation—might be attained by perforating the bandage without sacrificing in other respects its usefulness. In pursuance of this plan, I procured an ordinary shoe-punch and riddled the bandage with holes—about nine to the square inch. By punching three or four thicknesses at once, the labour was considerably facilitated. This bandage was applied with entire success. Ventilation is perfect. The leg feels cool, dry and comfortable, and at this date the ulcer has almost entirely healed.—Dr. Lewis in *Med. Times*, Phila.

Ocular Symptoms in Different Diseases.—Dr. Gorecki has tabulated his views as follows:

Blepharoptosis, or the falling of the upper eyelid, indicates paralysis, complete or incomplete, of the third pair.

Lagophthalmos, or inability to close completely the palpebral fissure, is a sign of facial hemiplegia, idiopathic or a symptom of cerebral disease.

Strabismus occurring suddenly and accompanied by diplopia is most frequently the result of some cerebral affection.

Xanthelasma (a yellow lamina sometimes met with in the skin) of the eyelids occurs in certain alterations of the liver.

Subconjunctival ecchymoses are frequent in whooping-cough, and may sometimes, at the beginning of the complaint, clear up a difficult diagnosis.

Redness of the conjunctiva, watering of the eye, etc., indicate in the child the outbreak of some eruptive fever, particularly measles. The prognosis is favorable if the tears come when the child cries, but fatal if the secretion of the tears is arrested.

Spots on the cornea are often the indication of a strumous constitution.

Dilatation of the pupil, or mydriasis, indicates excessive fatigue, the existence of intestinal worms, meningitis in the second stage, or a true amaurosis. The dilatation is most frequently connected with atrophy of the optic nerve. It is seen also during an attack of epilepsy, on coming out of chloroform, after belladonna-poisoning, etc.

Unequal dilatation of the two pupils points to the onset of general progressive paralysis.

Contraction of the pupil is one of the early symptoms of *tabes dorsalis*. It is met with also at the beginning of meningitis, in opium-poisoning, and in the first stage of chloral-poisoning.

Deformation of the pupil, particularly after the injection of atropin, indicates an old iritis, in nine cases out of ten, of syphilitic origin, if not depending on some disease of the neighboring parts.

Cataract in subjects under say forty or fifty is frequently of diabetic origin, and constitutes soft cataract.

Finally, the ophthalmoscope enables us to recognize the retinitis of albuminuria in Bright's disease, of simple polyuria, and sometimes in the case of women during pregnancy. Retinal hemorrhages, œdema of the retina, and embolism of its central artery are sometimes met with in organic affections of the heart. Optic neuritis and perineuritis, and atrophy of the disk, are symptoms of syphilis, or of tumors in the neighborhood of the cerebellum or the corpora quadrigemina.—*Gazette des Hôpitaux; Glasgow Medical Journal.*

Consultations with Homœopaths.—The following extract is from an editorial in the *Medical Times* of Philadelphia, Oct. 8, '81: Upon the other side of the Atlantic the subject of the relations between "homœopaths" and "regulars" in the profession is attracting renewed attention, and some disposition seems to exist towards breaking down the barriers which have so long stood hard and firm between the two camps. Both homœopathy and allopathy are most dangerous errors. These things being so, why cannot the "regular" meet the "homœopath" in consultation? The "regular" can and will meet the "homœopath" just so soon as the latter is ready honestly and fairly to meet the "regular." The scientific physician says, "I believe in no therapeutic dogma; I desire to get all out of science that I can to help me in the cure of diseases. But I recognize that science is yet very imperfect; and from Choctaw or Hottentot, from old woman or young maiden, from homœopath or allopath, from king or peasant, from savant or quack, I will eagerly seize aught which shall aid me in the battle for life." The moment that the "homœopath" takes this ground, that moment he is side by side with the "regular." It is no longer homœopathy or allopathy, but common-sense doctoring. But until the homœopath does this it is impossible for the two physicians to work together. If the homœopath is honest, the regular is yoking himself with one who is maimed and crippled by an adhesion to an old and exploded fallacy; and Paul says most truly, "be not unequally yoked."

If the homœopath is willing to sink his homœopathy, and, in fact, habitually practises something else than homœopathy, no honest man can meet him in consultation without smearing his own self-respect. To gain practice by taking advantage of popular ignorance and prejudice, and to ride into

wealth upon a lie, is what no upright man can do; and to associate with a man that does this is dishonor.

This, it seems to us, is the whole matter in a nutshell. The general medical profession recognize that neither the doctrine of similars nor that of dissimilars is correct; and the moment any man comes to this conclusion, and honestly acts thereby, he is part of the regular profession, a peer of any. Until then he must occupy the position he now does.

PUERPERAL CONVULSIONS. — Several cases in which pilocarpin, by mouth and hypodermically, was used in eclampsia, are reported with varying results. Langer asserts that it excites uterine contractions and renders them more powerful, and, in two or three cases, as many physicians report a similar result; but Kroner used *(Am. Jour. Obstet.)* injections of pilocarpin in four cases without any appreciable effect upon the uterus, although the toxic effect of the drug was marked.

The weight of opinion seems to favor chloral in large doses by the rectum. Guyot (France) reports remarkable success, thirteen or fourteen cases being saved. He injected into the rectum from one to four drachms in twenty-four hours. Dr. Goodell believes it the best single remedy. He directs a drachm by rectum, or twenty grains by mouth, repeated as often as may be necessary, and asserts that he has never lost a case. Other writers are equally laudatory of chloral, while none discard chloroform. With regard to the induction of premature labor in eclampsia, there seems to be a growing sentiment in its favor, and successful cases are recorded.

Blood-letting is apparently growing in favor again. Many writers advocate it, or at least speak of it as a too much neglected remedy. Dr. C. C. P. Clark *(Am. Jour. Obstet.)* is a strong advocate for the use of morphia in heroic doses. He argues that a woman who bears her pregnancy lightly never has convulsions, hence a prophylaxis consists in removing all irritating conditions. In eclampsia the nervous system is peculiarly tolerant of opiates. Ordinary doses are useless. Inject at once into the arm *a grain and a half of morphia;* should the paroxysms return any time after two hours, repeat the dose. If in labor, repeat the dose in eight hours, anyway. He says: "This quantity may look large, but I am perfectly confident, after having tried it many times, that it is absolutely safe. I am almost prepared to swear that twice the quantity, not repeated, would do no harm to a patient in a strongly eclamptic condition."—*H. Gibbons, Jr., in Pacific Med. Jour.*

INTRA-SPLENIC INJECTIONS OF FOWLER'S SOLUTION IN HYPERTROPHY OF THE SPLEEN. — Prof. Mosler, of Greifswald, has treated a chronic enlargement of the spleen by means of parenchymatous injections of carbolized water and Fowler's solution. The action of the contractile elements of this organ is first to be stimulated by the application of means designed to affect them directly; then, for several hours previous to making the injections of Fowler's solution, poultices of ice are to be applied over the splenic region. In Mosler's opinion, parenchymatous injections produce much more marked effects than the internal use of the same remedies.

Certain precautions must be taken. 1. If the splenic tumor is a hard one, it makes no difference whether or not the hemorrhagic diathesis or extreme anæmia coexists. 2. The preliminary precautions above mentioned should be taken. 3. Fowler's solution is the best medicine to use. Mosler reports several cases, in one of which benefit was obtained after half a syringe and then a whole syringeful of Fowler's solution had been injected!—*Allg. Med. Cent. Zeit.—Med. Times, Phila.*

PIGEONS AS MESSENGERS FOR PHYSICIANS.—"A physician of Erie, Pennsylvania, is training homing pigeons for use in his practice. Some of his young birds put upon the road to make records for distance have made very good time, viz., 50 miles in 90 minutes, 66 miles in 82 minutes. Homing pigeons are largely used by country physicians both here and abroad. One doctor in Hamilton County, N.Y., uses them constantly in his practice, extending almost over two townships, and considered them an almost invaluable aid. After visiting a patient he sends the necessary prescription to his dispensary by a pigeon; also any other advice or instruction the case or situation may demand. He frequently also leaves pigeons at places from which he wishes reports of progress to be dispatched at specified times or at certain crises. He says he is enabled to attend to a third more business at least through the time saved to him through the use of pigeons. In critical cases he is able to keep posted by hourly bulletins from the bedside between daylight and nightfall, and he can recall case after case where lives have been saved which must have been lost if he had been obliged to depend upon ordinary means of conveying information.

INFANTILE DIARRHŒA.—In infantile diarrhœa due to indigestion and attended by acidity, the following combination is very efficacious:—

℞ Pulv. ipecacuanhæ.....gr. ss.
Pulv. rhei.....gr. ij..
Sodæ bicarb.....gr. xii. M.

Div. in chart no. xii et sig.—One powder every four to six hours to an infant one year old.—*Dr. J. Lewis Smith.*

HYDROBROMATE OF IRON IN CHOREA.—A correspondent in the London *Lancet* gives the following case:—An anæmic, badly-nourished girl, æt. 14, was frightened by a dog, and almost immediately afterward developed choreiform movements. At the time of my visit, two days after the onset, the child's contortions were painful to witness; her sleep was disturbed, and it was with difficulty she could convey her food to her mouth. The heart sounds were normal, and there was no history of previous cardiac or rheumatic affections. After attending to her digestive organs, I prescribed syrup of hydrobromate of iron in 20 minim doses. The effect was very marked. The sedative action was speedily apparent, as the convulsive movements became gradually less severe, and the control of the muscles more readily recovered; whilst at the same time the anæmia was yielding to the accompanying iron. The continued use of the drug for about 20 days completely removed the affection.

IODOFORM IN THE VULVITIS OF CHILDREN.—Prof. Parrot applies iodoform by means of a badger's-hair pencil at whatever stage the apthæ may be in, covering the parts affected with a thick layer of iodoform without previous cleansing, and then applying a little charpie. This dressing is repeated every 24 hours, until amendment takes place, which it usually does very rapidly. Even after the first application it is rare not to find a considerable improvement. The ulcerated parts look as clean as if they had been carefully washed. Their borders sink and their cavities fill up, and when they are not very extensive they are not easily distinguished from the surrounding parts. The changes take place rapidly, and lead to the speedy disappearance of vulvular or perineal breaches of surface.—*Med. and Surg. Reporter.*

PLAGIARISM IN MEDICAL LITERATURE.—The *Med. Press and Circular* quotes the following as coming from an American surgeon present at the London International Medical Congress: "Few of us pretend to write anything original; we either haven't the time or we haven't the mind. You Europeans leave us nothing to do, and so instead of pretending to take you down a stripe, we take a book that we guess will suit our purpose, make a few foot-notes, and stick another name on the title-page. The book is none the worse for it, and its new author is helped like a lame dog over a tall stile."

LINES ON JENNER.—

"Within this tomb hath found a resting-place
The great physician of the human race,
Immortal Jenner! whose gigantic mind
Brought life and health to more than half mankind.
Let rescued infancy his worth ploclaim,
And lisp out blessings on his honoured name;
And radiant beauty drop one grateful tear,
For beauty's truest friend lies buried here."

PAINS IN THE FEET.—In a paper read at the Boston Society of Medical Improvement (Boston *Journal)*, Dr. Curtis enumerated the various affections in which *pododynia* or *podalgia*, or painful affection of the feet, may exist independently of all signs of disease of the part itself. These are:

1. *Urethral stricture*, as observed by Luxmoor, Brodie, and many others.

2. *Vesical calculus.* Pitha relates a remarkable case of a patient who was enabled, by the diminution of a sense of burning of the sole of the foot, to indicate precisely the progress of the diminution of the calculus by means of lithotrity.

3. *Cysto-prostatitis*, or inflammation of the neck of the bladder, in a case met with by Dr. Curtis, the pain in the neck of the bladder was accompanied in corresponding degree with pain in the feet of a similar character.

4. *Cystalgia*, or neuralgia of the neck of the bladder. Pitha is, himself, a well-marked example of the co-existence of the two affections.

5. *Gout.* Under this head, the observations of Paget, Duckworth, and Wier Mitchell, are referred to.

6. *Renal calculus* occasionally gives rise to pain irradiated to the heel.

7. Fournier and others describe this pain as occasionally met with in *syphilis* and gonorrhœa.

8. In *locomotor ataxy* the heel may be the first, or, for a while, the principal seat of the lancinating, or boring pains, characteristic of the first stages.

9. Prof. Gross describes an obscure form of pain in the feet, under the name *pododynia*, which is met with in certain sedentary classes of artizans, especially tailors.—*Med. and Surg. Reporter.*

NITRE-PAPER IN ASTHMA.—Dr. Murrell (*British Medical Journal*, June, 1881,) bears testimony to the great value of the fumes of nitre-paper, if properly prepared, in many cases of asthma. Pieces of white blotting-paper, six inches square, are saturated in a hot concentrated solution of chlorate and nitrate of potassium. Six of these pieces are laid one over the other, so as to form a thick tablet. Before quite dry, the pieces of paper may be individually sprinkled with Friar's balsam, camphor or some other aromatic. When used, the tablet is to be folded like a book-cover, and placed on its edges on a plate, and then lighted.

PRIMARY CANCER OF THE PANCREAS.—Dr. Kennig reports, in the Petersburg Medical Woch., February 2, a minute history of a case of this rare affection occurring in a woman aged fifty-three.—*Med. News and Abstract.*

The death of Dr. J. G. Holland is announced in our exchanges.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

☞ Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. MCMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 16 Rue de la Grange Batelliere, Paris.

TORONTO, NOVEMBER 1, 1881.

This Journal has the largest circulation of any Medical Journal in Canada.

OPENING OF THE MEDICAL COLLEGES.

The Canadian Medical Schools began their labors for the session, 1881-82, on the first of last month, with an unusually large attendance in all as compared with former years. Upwards of 130 freshmen have entered the two Medical Schools in Toronto, and of these, Trinity Medical College has the lion's share. In some of the schools the work of the session is commenced by a special introductory lecture, on some subject of general interest. This practice is observed, especially in McGill College, Montreal, and in Trinity Medical College, Toronto. In the former the opening lecture of the session was delivered by Dr. Buller, Prof. of Ophthalmology and Otology. The lecture was of a practical character, and as was to have been expected, he dwelt at considerable length upon the advantage to the general practitioner of a fair knowledge of the essential principles of diseases of the eye and ear. The remarks were timely, as it is a deplorable fact that too little attention is paid by the general student to the study of diseases of these delicate and important organs, and we hope the learned gentleman will be able to excite in the minds of his own students, and medical students generally, a little more interest in the subject which he has the honor to teach in McGill College. In Trinity Medical College the introductory lecture was delivered by Prof. Fulton, in the large theatre of the school, which was filled to overflowing. His lecture consisted of advice to young men commencing the study of medicine, and also a reference to the principles which should guide those who aspire to become members of the medical profession. He inculcated constant steady work, and diligent care and attention to the minutest details. The times in which we live, he said, demanded an ever-increasing effort to keep pace with the rapid strides of medical science. Never before in the world's history was competition in every calling so fierce as now, never did success in more than a moderate degree demand for its attainment, such a union of physical and intellectual qualities as in the present day. He also pointed out the dangers of attempting too much, of striving to excel in all arts, and advised them to concentrate their energies while at college almost wholly upon medical literature and in attendance upon lectures. In view of the nature of their calling, he counselled early cultivation of the faculty of self-reliance, pointing out to them that they would not always have their books and their teachers by their side, and he who would exercise self-reliance under great responsibility and in trying circumstances must begin early to practice it. He also encouraged punctuality, and the desirability of economizing time, and pointed out what had been accomplished by many great men who never allowed their moments to fall idly to the ground. He then drew a word picture of the student who is continually procrastinating his work from day to day, and from session to session, until disaster overtakes him in his final examination. He also impressed upon them the value of careful observation, and especially clinical observation and close attention to hospital work. He also counselled them to cultivate independence of thought and the exercise of reason and not to become blind followers of this or that authority—but to exercise their reason as well as their memory. In regard to the subjects of study embraced in their course, he alluded especially to the importance of anatomy, the key stone to medical science, and also to that closely allied branch, physiology. The subject of therapeutics—that science whose application to disease, is the ultimate aim of our art—was also brought prominently before the attention of the young student. He then addressed himself more especially to those who were spending their last session in the college, and who will soon be taking their places alongside those who are actively engaged in practice. Among the most important faculties, he said, which a young man commencing

practice can possess are, tact—practical talent—and a good knowledge of human nature; to these may be added decision, presence of mind in all emergencies, perseverance and a happy manner. Upon each of these qualities he dwelt briefly, pointing out by precept and example, what might be accomplished by their cultivation, and what the result of their neglect. He also pointed out that medicine was not a money making profession, although some few successful men acquired, late in life, a sufficient pecuniary recompense for their labours; while on the other hand they would occasionally receive rebuffs and insults for their kind offices from ungrateful patients. He then proceeded to define the difference between legitimate medicine and quackery, by saying that one deals in truth and honesty, the other in fraud and deceit. The honest scientist bears no relation to the designing, ignorant pretender. But as it is sometimes difficult to say in natural history whether a given specimen belongs to the animal or vegetable kingdom, so here in like manner, it is sometimes equally difficult to say to which class the individual belongs. There are many in each army near enough to shake hands, and there are not a few in the regular army who would be more at home under the rebel flag. He alluded to the high compliments paid to the medical profession by Gladstone and other eminent men from time to time, and concluded his remarks with the following extracts from the beautiful peroration in the address delivered by Sir James Paget at the recent Medical Congress.

"Let us always remind ourselves of the nobility of our calling. I dare to claim for it, that among all the sciences, ours, in the pursuit and use of truth, offers the most complete and constant union of those three qualities which have the greatest charm for pure and active minds—novelty, utility and charity. These three, which are sometimes in so lamentable disunion, as in the attractions of novelty without either utility or charity, are in our researches so combined that, unless by force or wilful wrong, they can hardly be put asunder. And each of them is admirable in its kind. For in every search for truth we not only exercise curiosity and have the delight—the really elemental happiness—of watching the unveiling of a mystery, but on the way to truth, if we look well round us, we shall see that we are passing among wonders more than the eye or mind can fully apprehend. And as one of the perfections of nature is, that in all her works, wonder is harmonized with utility, so is it with our science. In every truth attained there is utility either at hand or among the certainties of the future. And as in every pursuit of knowledge there is the charm of novelty, and in every attainment of truth, utility, so in every use of it there may be charity. I do not mean only the charity which is in hospitals or in the service of the poor (great as is the privilege of our calling in that we may be its chief ministers) but that wider charity which is practised in a constant sympathy and gentleness, in patience and self-devotion.

"Let us, then, resolve to devote ourselves to the promotion of the whole science, art, and charity of medicine. Let this resolve be to us as a vow of brotherhood; and may God help us in our work."

TRADE MARK LITIGATION.

An interesting suit is now pending in the United States' law courts in relation to the use of the trade mark "Tonga." This drug first attracted the attention of Drs. Sidney Ringer and William Murrell, of London, as a reputed Fiji island remedy for neuralgia. It was investigated by them and the results of their investigations published for the benefit of science in the London *Lancet*. The statements in regard to the efficacy of the remedy in neuralgia, published by these investigators, created more or less interest in the drug, and a demand sprung up for the article both in England and America. This induced Messrs. Parke, Davis & Co., of Detroit, to send a special agent to the Fiji islands, to procure a supply of the genuine article to meet the demand. This they placed in the hands of the profession throughout the country, donated samples to hospitals and public institutions for trial, and also offered it for sale in the ordinary course of business. At this stage of the proceedings, Messrs. Allen & Hanbury, an English house, came forward and instituted legal proceedings against Parke, Davis & Co., for what they allege is an infringement of their trade mark. It seems that the English firm above-named has registered the name "Tonga," in Great Britain and the United States, as a trade mark on the

drug tonga and seek to gain an unlimited monopoly of the manufacture and sale of the article by this means. The case is attracting considerable interest among the drug trade in the United States, as it involves a principle which has frequently been passed upon by the ordinary courts, but apparently has never been definitely and specifically settled by the Supreme Court; that is, whether a party has the right to trademark the proper name of an article and thus exclude others from the manufacture of the same article, and the name having by adoption and use become the name of the article, whether others have the right to manufacture and sell the same article under the same name, the article not having been patented. This will affect many of the pharmaceutical preparations for which protection is sought by registering the names as a trade mark. The defendants regard the principle involved in the case as of vital importance to the drug trade and have determined to test it in the highest judicial court in the United States.

There is another matter closely allied to this one, which calls for a passing remark, that is, the practice of some pharmaceutical chemists in recommending their preparations for general use by the public. There can be no doubt that the medical profession is greatly indebted to the pharmaceutical chemists for the introduction of many elegant and useful preparations, and they deserve to profit by their labors and ingenuity, but it is surely not in the interest of either the profession or the public that pharmacists should prescribe them for the public, and thus usurp the place of the regular physician. This, we regret to see, is being done in the daily press by several pharmaceutical chemists, whose preparations bear the imprint of a trade mark. We would warn those pharmaceutical chemists who appeal to the general public to purchase their wares, that the profession will be compelled, in defence of its own privileged rights, and for the good of the community, to abstain from countenancing in any way the preparations so advertised, or prescribing them to their patients. It is not necessary that we should say anything regarding the great injury that is done to the public, by the indiscriminate use of patent or proprietary medicines and pharmaceutical preparations and drugs of all sorts, without the advice and direction of an intelligent physician.

THE GROWTH OF EMPIRICISM.

Within the past few years quackery has made progress to an alarming extent, both at home and abroad. Not only has the sale of patent medicines largely increased, but other types of empiricism of a more serious nature have cropped up, which too often have in connection with them, the names of qualified physicians. We can scarcely pick up a newspaper, religious or secular, which does not contain an advertisement of some secret formula which claims to be a specific for some disease, and to make it appear more plausible, it is usually over the name of the Rev. somebody or the distinguished Dr. some one else. These charlatans claim to have made great discoveries in foreign countries, in which they have found a certain remedy for consumption, rheumatism, liver complaint, cancer, impotency, spermatorrhœa, or some other disease. They send circulars and pamphlets through the mails, in which they frequently describe minutely, certain physiological phenomena, as diseased conditions, and the unsuspecting reader is led to believe that his destruction is inevitable, unless these symptoms are relieved, and as a matter of course, their remedy is necessary to perform the cure. Every physician knows how detrimental to the public welfare such devices are, and how easily the public are duped by the wiles of these charlatans, hence it becomes the duty of every practitioner, as a benefactor of humanity, to endeavor to suppress such practices in every possible manner. No doubt it would be difficult to stop these impositions entirely, but a great deal might be done towards it, if the profession would adopt some definite course, and persist in endeavoring to correct the evil.

We have at least one newspaper in Canada in which a column each week is devoted to prescriptions and advice to the sick. A few weeks ago, a correspondent of this paper complained of a pain under the shoulder-blade, and through the chest. He had "applied mustard plasters without relief." For answer he was assured his disease was neuralgia, and was advised to use hypodermic injections of morphia.

Comment is wholly unnecessary, but we might remark that perhaps the editor has educated his patrons in the use of the hypodermic syringe, and has also concluded on his own account that the

indiscriminate use of morphia can do no harm if it does not benefit.

It is high time the public was taught that there is no secret in the mere prescription which a physician gives, and that he cannot prescribe intelligently without seeing the patient; and also, that patent nostrums are not suitable for the cure of disease. A physician will experience little difficulty in convincing those of average intelligence, that the human system is too delicate to be thus tampered with. The great masses, however, do not stop to consider, but are ready to be carried away by the most flimsy arguments of the charlatan.

HEROIC SURGERY.—Prof. Volkman in his address before the International Congress, mentioned the following cases of heroic surgery, recently and successfully performed. For a large enchondroma in the costal pleura that occupied the left wall of the thorax, Prof. Fischer removed a large piece of the chest-wall and ribs, so that the heart and lungs were exposed, and an opening as large as a child's head was made, aud yet the patient was able to be discharged from the hospital after four weeks.

In the case of a large echinococcus of the liver, which in front and at the side was covered with thick layers of liver tissue, and which projected into the thoracic cavity, after resection of the seventh rib, he opened the healthy pleural cavity, which was free from adhesions. The thorax was freely opened, the thinned diaphragm cut into, the echinococcus sac opened, the animal bladder extracted *in toto*, and the patient recovered without complication. A similar operation, with like results, was conducted by Mr. Israel of Berlin. Mr. Hahn, also of Berlin, in two cases of wandering kidney, where the mobility and the discomfort induced thereby had attained an unusually high degree, drew out the organ in question through a large wound in the loin, and sewed it into the same. Both patients recovered and lost their pain. The opening of the joints seems a most innocent performance. Hips and knees are cut open, in order, in a case of luxation, to search for the obstacle which opposes itself to reduction, to suture the ruptured tissues, and in obscure symptoms to clear up the diagnosis *in vivo* by means of autopsy. More than two hundred times, he alone, without in one instance bad results following, had incised, drained, and washed out diseased knee-joints without exciting suppuration.

MEDICAL COLLEGE ANNUAL DINNERS.—During the present month the usual annual dinners of the medical schools in this city will take place. These reunions of past and present students, practitioners, and teachers, are always looked forward to with a good deal of interest, and pleasureable anticipation. It affords an opportunity of coming together and joining in friendly intercourse, and of renewing acquaintances which otherwise might become forgotten or lost entirely. The *British Medical Journal*, in commenting in a recent issue, on the custom in England, says, "the hospital dinners of this session appear to have been very successful, and the habit of coming up to attend the opening meetings of their old medical schools, appears to be growing among practitioners of the country. Nothing could be more agreeable than the reunion in which past students, teachers, present practitioners, and students join in the common act of homage to their Alma Mater, and renew or form new ties of friendship and interdependence based upon community of interest in the hospitals and schools around which centre pleasant and fruitful reminiscences of the past, and large and generous hopes for the future. The hospitals and medical schools are, in the medical profession, what universities are in other professions, and the sentiment of attachment to the old hospital and school in which the days of studentship were passed, is an influence wholly good, and one which it is part of the result of a liberal education, and one of the elements of a high-toned professional life, to cultivate and cherish."

ANOTHER CARD OF THANKS. — In the Perth *Expositor*, of Oct. 25, appears a letter of thanks from one McTavish, of Lombardy, to Dr. ——. for having "cured his son of a running sore on his leg, after no less than seven doctors had failed." We cannot assume for one moment that the Dr. named had aught to do with the insertion of this letter. The author has no doubt inserted the letter, and paid for it as a special advertisement, alongside of Cluthe's Spiral Truss, St. Jacob's Oil, Fowler's Extract of Wild Strawberry, and Burdock Blood Bitters, in order to acknowledge

to the world, at the same time, the doctor's great skill and "McTavish's" unbounded generosity. In paying the doctor for those services which he is so anxious to make public, he says, "he held in his hand a sum of money which he would gladly have paid, but the doctor's charge was fifty dollars less than the sum he held." McTavish! Be generous! Go and pay the doctor that fifty dollars and relieve your conscience. We are certain he is entitled to it, and as much more, or his case is different from that of the majority of his confrères.

DR. THEOPHILUS MACK.

As we go to press we have received the sad intelligence of the death of Dr. Theophilus Mack, of St. Catharines, in the 61st year of his age. Dr. Mack was well known to the profession and public in Canada and the United States, especially through his connection with the mineral springs and Springbank Hotel, which have been the resort of health and pleasure-seekers from all parts of the continent. The deceased was a native of Dublin, Ireland, and emigrated to this country in 1829. He studied medicine in the United States, and graduated in the Geneva Medical College, N. Y., in 1843, and subsequently received the licence from the Upper Canada Medical Board in the same year. He was the founder of the St. Catharines Marine and General Hospital, and School of Training for Nurses. He paid close attention to his professional duties, and had acquired a well-earned reputation for skill and intelligence in his profession. His loss will be sadly felt by a large circle of friends and admirers, besides by many to whom he ministered.

THE PRINTOGRAPH.—This modern invention for the copying of letters, circulars, etc., is a great convenience to the literary and commercial public. We have had one of Pim's Royal printographs in use for some time and find it a most useful, nay almost indispensable article. From one to two hundred legible copies of a letter or circular can be taken from a single original, in a few minutes, by means of this useful invention. There can be but one opinion regarding the utility and value of the printograph.

VACCINATION AS A PREVENTIVE OF HYDROPHOBIA.—A report is going the rounds of the daily press, that a veterinary surgeon, Dr. Galtier, of Lyons, France, has discovered a remedy for rabies. He injected the saliva of a mad dog into the veins of ten sheep, and at the same time placed the saliva of the same dog in contact with the nerves of ten other sheep. The latter all died with every symptom of rabies, while the other ten remained perfectly well. He also ascertained that when the virus of rabies was injected into the veins of sheep it was impossible to produce rabies in them by any subsequent experiments. He claims, therefore, that hydrophobia is purely a disease of the nerves, and that to inject the virus of rabies into the circulation, is a certain protection against the disease, at least in the case of sheep. Although it may seem improbable that protection against hydrophobia can be secured by the method proposed by Dr. Galtier, this is no argument against it. Nothing could seem more improbable than the assertion that to inoculate a person with the cow pox would secure immunity from small-pox; but experience proved that Jenner was right. If Dr. Galtier has really found a sure protection against hydrophobia, he will deserve to rank with Jenner in the gratitude of mankind.

DR. MCLEAN'S MALPRACTICE SUIT.—In our last issue we alluded to a suit for malpractice recently instituted against Dr. McLean of Ann Arbor. Dr. McLean denies the plaintiff's allegation *in to o*, and we have his authority for saying that the records of the Supreme Court of Illinois denounce his assailant as a swindler in the plainest terms. The Dr. also has unimpeachable expert evidence to prove that there was nothing unusual or improper in his treatment of the case, nor in the result which followed it.

JOHNSTON'S FLUID BEEF.—This preparation of fluid beef has now been before the public and the profesion for several years and is every day growing in public favor. It is not only extensively used in Canada wherever its merits are known, but it is also extensively used in Hospitals and Asylums in Great Britain and the Continent. Several months ago we were shown through Mr. Johnston's establishment in Montreal, and were much interested in the process of manufacture.

Johnston's method is different from the ordinary method. He first makes an extract of beef, similar but superior to that of Liebeg, to which is added the lean of beef in a finely pulverized state. The beef is partially cooked and carefully dried at a certain temperature, and is then reduced to powder by powerful machinery. A certain proportion of this finely powdered beef is then added to the extract before canning. This process of amalgamation is a very tedious one, requiring about four hours to complete it. The powdered beef has to be added slowly so as not to make the fluid lumpy. Johnston's fluid beef has been shown by analysis to contain salts of flesh and moisture, or or beef-tea food, 33.30; albumen, 22; fibrin, 35.50; mineral, 1.70. He is continually in receipt of testimonials as to the value and efficacy of his fluid beef in all classes of cases. We have used it extensively in our practice, and can fully endorse it as a most reliable and valuable liquid food for invalids.

College of Physicians and Surgeons, Que.—The above-named College held its semi-annual meeting in Quebec, on the 28th of September, Dr. R. P. Howard, President, in the chair. The following Governors were present:—Drs. Austin, Belleau, Bonin, Comé, Campbell, Craik, Gervais, Gingras, Gibson, Hingston, Kennedy, Ladouceur, Lafontaine, Lemieux, Laberge, Lachapelle, Marmette, Marsden, Perrault, Parke, Rinfret, Rottot, R. F. Rinfret, Rodger, Rosseau, Hon. T. Robitaille, Hon. J. J. Ross, Sewell, St. George, and Worthington.

After routine, the following motion was adopted,—"That this Board has learned, with deep regret, of the death of Dr. F. A. H. Larue, Professor in Laval University, a gentleman distinguished alike for his medical and scientific attainments, and whose reputation extended not only throughout the entire Dominion, but also to the neighboring Republic. This College, of which he was so long a member, desires to express to his family and relatives its sincere sympathy in their bereavement."

After the transaction of ordinary business, the following graduates received the Licence, on presentation of their diplomas:—Drs. C. N. Barry, A. C. G. Delery, L. G. P. DeBlois, G. Demers, P. A. Gavreau, A. Gibeault, W. L. Gray, G. Huol, J. E. Lemaitre, N. Mercier, G. T. Ross, A. Trudel, F. N. R. Spendlove, R. H. Wilson. Dr. T. J. Symington, of Camlachie, Ont., obtained the licence after passing a successful examination.

Operation for Strangulated Hernia.—Mr. Paul Swain, in a paper on this operation, *Brit. Med. Journal*, objects to the usual practice. After the first incision through the skin, a bit of tissue is pinched up with the forceps and nicked with the scalpel, so that a director can be introduced under the tissue which is then divided by the scalpel But unless the scalpel be very sharp the tissues recede before it, and it is very difficult to keep the deeper incisions as large as the superficial one. The scalpel is also very apt to slip off the director. Mr. Swain uses, in place of the scalpel and director, the blunt curved scissors used for extirpation of the eyeball, and finds that the operation can thus be performed with greater rapidity, neatness and safety.

Montreal Medico-Chirurgical Society.—The following officers have been elected for the ensuing year:—*President*, Dr. George Ross; *1st Vice*, Dr. R. A. Kennedy; *2nd do.*, Dr. T. A. Rodgers; *Treasurer*, Dr. W. A. Molson; *Secretary*, Dr. O. C. Edwards; *Council*, Drs. F. W. Campbell, Roddick and Osler.

Removals.—Dr. Morton has removed from Bradford to Toronto. Before leaving he was made the recipient of a silver tea service and a complimentary address at the hands of some of the residents of the former place. Dr. Going, of London, has also removed to this city. We welcome these gentlemen to Toronto.

Credit to whom Credit, Etc.—The recipe in our last issue for improved tincture of iron was first published in the *Canada Medical and Surgical Journal*, and should have been credited to that journal. We extracted it from a foreign journal, in which it appeared among miscellaneous items, the original source not being mentioned.

Physiological Treatment of Pneumonia.—In the N. Y. *Medical Record*, Sept. 10th, will be found an article by Dr. Everett, on the physiological treatment of pneumonia by means of the continuous inhalation of cold air at a temperature of 10° to 15° F. The patient's body is at the same time kept at a temperature of 80° to 85° F., and in this way the writer claims that the afflux of blood is changed from the central organs to the periphery.

In winter time the air may be introduced from the outside by an elastic tube attached to an inhaler, and in summer the cold air can be breathed through a refrigerator. He gives several cases in which this treatment proved satisfactory.

Sulphurous Acid in the Treatment of Gonorrhœa.—Surgeon-Major Wilson contributes an article in the *Lancet* for September, on the above subject. He has treated sixteen cases of gonorrhœa by injections into the urethra of sulphurous acid and water, diluted 1 to 15, three times a day. When there is pain or chordee he uses the injection only once or twice daily. The majority of cases treated were second attacks. The purulent discharge soon become scanty, and in two or three days becomes thin and gleeety. When this watery condition occurs the remedy should only be used once in twenty-four hours. The patient should be kept quiet and placed on a moderate diet. Recovery is rapid and satisfactory.

Puttner's Emulsion of Codliver Oil.—This preparation has now been before the profession for some time, and has been very highly commended by the physicians in the Maritime Provinces; and so far as we can judge of its merits, through a trial of it in several cases, we think its qualities are not at all over-estimated. It is prepared by C. H. Puttner, Ph. M., Professor of Pharmacy, Halifax Medical College, N. S., and the preparation is endorsed by many of the leading physicians in Halifax and other places. We would bespeak for it a thorough trial by the profession of the Dominion, and we feel assured it will not disappoint.

A Hospital Ambulance.—Through the private munificence of a lady of this city, a sum sufficient to purchase a Hospital ambulance was recently placed in Dr. O'Reilly's hands. The ambulance was built by Mr. M. Guy, carriage builder of this city, in the most approved style, and will be kept at Bond's livery stables on King Street, ready for use at a moment's notice.

The Value of Bacelli's Sign.—The difficulty of distinguishing before operation, between serous effusion in the chest cavity and empyema is well known. Dr. Bacelli of Rome, maintains, that in a case of pleuritic effusion, if the whispered voice is well conducted and pectoriloquous in character when listened to through the thickness of the fluid, it may be regarded as serous. On the contrary, if the whispered words are ill-conducted, or inaudible, the fluid will be found to be purulent. Dr. Bacelli is supported in his views by Prof. Semmola of Naples, and Dr. Theophilus Williams, of London, both of whom attach great value to this sign.

Appointments.—Dr. T. W. Mills, L.R.C.P., Lon. has been appointed assistant to the chair of Physiology, McGill Medical College, Montreal.

Dr. H. J. Saunders, M.R.C.S., Eng., has been appointed Prof. of Sanitary Science, in the Royal College of Physicians and Surgeons, Kingston.

Dr. J. H. Burns of this city has been appointed on the acting staff of the Toronto General Hospital, *vice* Dr. Canniff resigned.

Dr. Richard Gundry, medical superintendent, Spring Grove Asylum, has been appointed Prof. of Materia Medica, Therapeutics, and Mental diseases, in the College of Physicians and Surgeons of Baltimore.

An error occurred in the heading of the article in last month's issue on "Cold Water Treatment of Scarlatina," by "A. Worthington, M.D., Iroquois." It should have been A. Worthington, M.D., Clinton, Ont.

Books and Pamphlets.

Coulson on Diseases of the Bladder and Prostate Gland. 6th edition. New York: Wm. Wood & Co. Toronto: Willing & Williamson.

This book will be found a valuable repertory of the pathology and treatment of the affections of the above-named important organs. It is our belief that errors of diagnosis, and consequent misadventures in the management of cases of vesical and prostatic troubles, are not uncommon. Within the past summer we had the painful occasion of detecting, in a moribund octogenarian, a largely distended bladder, resulting from a prostatic hypertrophy which had escaped detection, and had caused the patient distressing and protracted suffering. The timely and skilful employment of the catheter would have saved the patient from days and months of unrest and agony.

Whenever an old man is found to be troubled with frequent requirement of micturition, associated with tardiness and triviality of urinal discharge, the condition of the prostate gland should command prompt attention. In the case above instanced it seemed to have been no more dreamed of, than though no such organ existed.

MEDICAL ELECTRICITY. A Practical Treatise on the Application of Electricity to Medicine and Surgery. By Robert J. Bartholow, M.D., Jefferson Medical College. 8vo., pp. 262, Illustrated. Philadelphia: H. C. Lea's Sons. Toronto: Hart & Co.

The author in his preface says, "that there are excellent works on medical electricity is undeniable, but some of them are too voluminous, others too scientific, and not a few wanting both in fulness and accuracy." He has endeavoured to avoid these errors, by preparing one so simple in statement that a student without previous acquaintance with the subject may readily master the essentials; so complete as to embrace the whole subject of medical electricity, and so condensed as to be contained in a moderate compass.

The work is divided into six parts. Part I.—Electro-physics is devoted to a description of the various instruments in use. Part II.—Electro-Physiology treats of the action of electricity on the different structures of the body. Part III.—Consists of an elucidation of electro-contractility and electro-sensibility. Part IV.—embraces a *resumè* of all that is known on the subject of electro-therapeutics, and is the most interesting part of the work. In his opinion one of the popular modes of applying electricity by means of the "electric bath," produces but little effect, so great is the resistance offered by the water to the progress of electricity. Charlatans who apply this method on their ignorant clients, impose upon them by connecting the electrodes with some part of their body. No matter how carefully applied, the electric bath is a very inferior application. General electrization comes in the same category. Part V.—Is devoted to the consideration of Electricity in Surgery, as the use of the galvano-cautory, electrolysis, and also the best forms of apparatus. He also describes Plante's cell for storing up electricity. In Part VI. he discusses thermo-electricity, differential thermometry, &c. The work is upon the whole one which we can heartily endorse in nearly every particular.

A COMPEND OF ANATOMY. By J. B. Roberts, A.M., M.D. Second edition. Revised. Philadelphia: C. C. Roberts & Co. Toronto: Willing & Williamson.

This little work is designed as a short guide to the student in the dissecting-room, and as an aid in following the lectures on anatomy. It is of convenient size to be carried in the pocket, and is only intended as a ready reference—not to supplant the ordinary text-books on anatomy—and as such it will prove useful. Of the kind, it is a most excellent little work.

THE PHYSICIAN'S VISITING LIST for 1882, by Lindsay & Blakiston: Philadelphia. Thirty-first year of publication.

We have just received from the publishers a copy of this deservedly popular visiting list. It is neat, compact, simple in arrangement, easily carried in the pocket and invaluable to the medical practitioner. It is also a companion which may frequently be consulted with advantage, containing as it does an almanac, Marshall Hall's ready method in asphyxia; poisons and their antidotes; the metric system of weights and measures; a posological table, and table for calculating the period of utero-gestation. They are arranged for 25, 50, or 100 patients, weekly.

INDEX CATALOGUE of the Library of the Surgeon-General's Office, United States Army. Authors and Subjects. Vol. II. Berlioz-Cholas. 4to. pp. 990. Washington: Government Printing Office, 1881. From the Surgeon-General U. S. Army.

We are pleased to receive the second volume of this magnificent work. It is, as far as possible, an index of all the medical literature of the world that is accessible. The nature of the task before the compilers may be gathered from the fact, that two large volumes have been published and they have only reached the letter C. in the alphabetical order.

Births, Marriages and Deaths.

On the 28th of September, J. R. Fraser, M.D., of Metcalfe, Ont., to Ella, third daughter of the late Stuart Evans, Esq., of Montreal, Que.

In Galt, on the 13th ult., of diphtheria, Agnes Cranston Graham, beloved wife of Dr. J. P. Brown, aged 30 years.

On the 19th ult., J. G. Bibaud, M.D., Prof. of Anatomy, Ecole de Medicine, Montreal.

At St. Catharines, Ont., on the 24th ult., Theophilus Mack, M.D., aged 61 years.

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Original Communications.

ELECTRICITY IN THE TREATMENT OF SPECIAL DISEASES.

BY A. M. ROSEBRUGH, M.D. SURGEON TO THE TORONTO EYE AND EAR DISPENSARY.

Read before the Toronto Medical Society, Nov. 17th, 1881.

Recently there has been a revival of the use of static or franklinic electricity in medicine, and important sedative and tonic effects are claimed for it. It is claimed by others, however, that these sedative and tonic effects are not equal either in variety or degree to those obtained by general faradization and central galvanization, and that they should be much superior to them, to compensate for the great practical difficulty in using static or franklinic electricity. It is claimed, moreover, that much as electricity is now used by the profession, it would be used still more were it universally known how valuable it is (as a general sedative and tonic) in the treatment of neurasthenia, hysteria, hysteroid diseases, certain phases of epilepsy, neuralgia, dysmenorrhœa, amenorrhœa, exophthalmic goitre, and in the sequelæ of certain acute diseases.

In the preparation of this *resumè* of practical eletro-therapeutics the following works have been consulted :—"Medical electricity," by Julius Althars, M.D., F.R.C.P.L. (1873). "The clinical use of electricity," by J. Russell Reynolds, M.D., F.R.S., (1874). "Clinical electro-therapeutics," by A. McL. Hamilton, M.D., (1873). "Lectures on electricity," by A. D. Rockwell, A.M., M.D., (1879). "Medical and Surgical electricity," by Beard and Rockwell, (1878 and 1881), and "Medical electricity," by Roberts Bartholow, A.M., M.D., LL.D., (1881).

PARALYSIS FROM DISEASE OF THE BRAIN.

In treating cases of *paralysis from disease of the brain*, (hemiplegia), the faradic and the galvanic batteries, are both required; the latter should contain 12 or 18 cells. The localized faradic current, applied just strong enough to cause muscular contractions, may be applied to the affected muscles within a week or two of the attack, and two or three weeks later a continuous current from 8, 10, or 12 cells of the galvanic battery may be applied to the head, back and side of the neck. A few weeks later still, the faradic current may be used as a tonic in the form of general faradization. In treating the paralyzed muscles, good results have been obtained both from the faradic and the galvanic current, but the best results may be expected from their combined use. The treatment may be commenced with the galvanic current, slowly interrupted, and followed by the use of the faradic current. Paralyzed muscles respond more readily to a slowly interrupted galvanic current than to the momentary flashing to and fro of the induced faradic current. Hence, in cases where farado-muscular contractility is very much weakened, or entirely absent, the galvanic current is used until the muscles respond to the faradic as well as to the galvanic current.

In using the galvanic current for paralysis of the arm, for instance, a large sponge electrode, well wetted, (usually the positive), is placed on the shoulder, and the other sponge electrode, also well wetted, is slowly moved down the arm, on all sides, so as to bring all the fibres of each muscle under the influence of the current *seriatum*. When one or both sponges are movable it is called a *labile* application, and when both are stationary it is called a *stabile* application. An application of the galvanic current made *labile*, is practically the same as an interrupted current, and when the application is thus made, a special current interrupter is not necessary.

A battery with 12 cells is sufficient for making these peripheral applications. The current should be used daily, or in alternation with the faradic current. The weakest current is to be used that will cause contractions when the current is interrupted; and it is a curious fact, that a paralyzed muscle will, in some cases, respond to a weaker galvanic current than the corresponding healthy muscle. These reactions are called *the reactions of degeneration*. In using either the galvanic or the

faradic current, the muscles should not be fatigued. A few seconds to each is sufficient.

In using the faradic current, for instance to the arm, instead of keeping one electrode in a fixed position on the shoulder, the two electrodes kept together—preferably by holding the insulated handles in one hand—are slowly moved over every part of the paralyzed muscles. More vigorous contractions will occur and with less pain, by making the application in this manner.

After the muscles of the arm and fore-arm are put in a better condition, special attention must be given to the muscles of the hand, and the applications made to individual muscles—first with the galvanic and afterwards with the faradic current—by means of small metallic electrodes covered with flannel or chamois, and well wetted. Duchenne's olive pointed electrodes are the best for this purpose.

In applying galvanism to the head, great care is necessary. The current should not be broken abruptly. The sponge electrodes should be kept steadily in one position, and the current gradually increased from the minimum to the maximum, and as gradually decreased to the minimum before the sponges are moved. In the Bartlett battery this is accomplished with the commutator or current-selecter, and in the McIntosh battery, by means of a bifurcated cord-electrode and a step-by-step arrangement. When great care is used, I find that the same end may be obtained very simply, by using large sponge electrodes and modifying the strength of the current by moderate or firm pressure on the sponges. A maximum of say 12 cells are put in circuit and the positive electrodes applied with very gentle pressure to the forehead. The negative is next very lightly and cautiously applied to the nape of the neck, and the pressure on the sponge very gradually increased, and afterwards the pressure increased on the positive electrode. On removing the sponges the process is reversed. It is well to bear in mind that the sudden opening of the circuit either by the sudden withdrawal of an electrode or by the loosening of the wire connections, will cause a shock even greater than that caused by the sudden closing of the circuit. The positive electrode is applied over the eye or on the temple of the side affected, and on the side opposite to that of the hemiplegia. Another plan is to apply the negative pole over the stomach, while the forehead, top of the head, nape of the neck, spine and cervical sympathetic are brought successively under the influence of the positive pole,—the same as in central galvanization.

In hemiplegia, much benefit is derived from passive motion of the limb, kneading of the muscles—doing it thoroughly and systematically—and applying dry heat. The skin should be well soaked with warm water before each application of the electrodes, and when the electrode is applied to a muscle, the patient should at the same time make an effort to contract it. Both at the time of the application and during the interval, the paralyzed muscles should be kept relaxed.

The prognosis is good in those cases where the electro-muscular contractility is simply diminished but not altogether lost. It may be even lost to the faradic current, but if there is any response to the slowly interrupted galvanic current, the case is susceptible of great improvement.

The prognosis is bad in two class of cases, first where there is absolutely no response either to the faradic or the galvanic current, and second, where the paralyzed muscles are plump, well-nourished, and respond normally to the faradic, as well as to the galvanic current.

Paralysis from Disease of the Spine.—In *paraplegia*, applications are made both to the spine and to the affected muscles, and both the faradic and the galvanic currents are used. In the acute stage, the treatment is confined to the muscles. The local treatment must be commenced promptly, to prevent wasting and degeneration. After all the acute symptoms have subsided, the spine is to be treated with the galvanic current and from 18 to 36 cells used. The sponge-electrodes —large and well wetted—are applied, the negative to the sacrum and the positive to the upper part of the spine. The latter is passed slowly down and on each side of the spine, so as to include the spinal nerve roots, and the sponge is rested specially on any tender points. Galvanization of the spine is also used in *chronic myelitis*, and striking results are claimed for it. A powerful battery is required, some using as high as 60 cells. The skin and the electrodes are well wetted and the current allowed to flow about two minutes.

The local treatment is commenced early and the applications made at first with the galvanic current.

Later, the faradic battery may be used, if the muscles respond to the faradic current. The weakest current is employed that will cause contractions.

Infantile Paralysis.—The electrical treatment in infantile paralysis should be commenced immediately after the termination of the fever. The galvanic battery is used, the negative pole being placed on the sacrum and the positive pole on the spine, just above the upper level of the diseased part of the cord. After one or two minutes, the negative electrode "is passed over the affected muscles in turn below, making each one contract several times,"* but fatigue is to be avoided.

A battery power of from 12 to 18 cells is used, and with the positive electrode above the diseased part of the cord and the negative on the muscles, the applications may be partly *labile* and partly *stabile* and the entire *seance* made to last from five to seven minutes.

The good effects of galvanism in these cases is due, according to Onimus et Legros, not so much to muscular contractions, as to its influence over the circulation, and over nutrition, and over the trophic system.

Peripheral Paralysis.—The best type of peripheral paralysis is that of facial paralysis. It may be caused by rheumatism, by injury, or by neuritis from disease of the middle ear. These cases are treated locally only. At the outset the galvanic current is used, and when nutrition is sufficiently restored to enable the muscles to respond to the faradic current, the latter is used to complete the treatment. In using the galvanic current, the positive electrode is applied over the seventh nerve in front of the ear, and the negative electrode is applied to the peripheral portions of the nerve. For the first few days a continuous current, from 12 or 18 cells, is used. Subsequently, the application is made *labile* and only 6 or 8 cells used; or the least number of cells that will cause contractions when the current is interrupted. The applications are made daily and for only a few minutes at a time. The muscles should be kept relaxed both during the interval and at the time of the application. The angle of the mouth may be drawn towards the ear and kept in this position, at least during a part of the time, by means of a metallic hook secured to a band fastened around the ear. In case of ptosis, the upper lid is elevated and strapped to the forehead.

Lead Paralysis.—This disease usually takes the form of paralysis of the extensor muscles of the hand, although other muscles are sometimes affected. The electrical treatment is principally by means of local galvanization. The positive electrode is placed in the arm-pit or on the nerve-trunk and the paralyzed muscles are each in turn brought under the influence of the negative electrode, the application being *labile.* A current form 10 or 12 cells is used for about ten minutes at a time, daily. The patient may also be treated by general faradization and central galvanization.

Diphtheritic Paralysis.—The treatment of cases of paralysis from diphtheria and other acute diseases is by galvanization of the nerve centres (central galvanization) and galvanization of the paralyzed muscles,—a weak interrupted current, say, from 3 to 4 cells, being used for a few minutes daily.

Hysterical Paralysis.—In hysterical paralysis the affected muscles are always plump and well nourished, and respond both to the galvanic and the faradic current, but the skin is not sensitive to the stimulus of the latter.

The constitutional disease is treated by general faradization: the paralyzed muscles by local faradization—using moist electrodes—and the anæsthesia by the faradic current and the electric brush. A single strong application of the faradic current to the larynx, is, in some cases, sufficient to relieve hysterical aphonia.

Progressive Muscular Atrophy.—These cases are treated by central galvanization and the application of the galvanic and the faradic currents to the affected muscles, using the currents alternately.

Locomotor Ataxia.—These cases are treated by central galvanization and general faradization, and the anæsthesia by the electric brush.

TREATMENT OF PAIN.

According to Dr. Anstie, "The constant current is a remedy for neuralgia, unapproached in power by any other, except blistering and hypodermic morphia, and the latter is often surpassed by it in the permanence of its effect, while it is applicable in not a few cases where blistering would be useless." Dr. Bartholow says, "There is no fact more certain than the power of galvanism to relieve pain." Drs. Beard and Rockwell, while admitting

* Bartholow.

that true neuralgia is most successfully treated by galvanism, claim that "hysterical neuralgia and so called pseudo-neuralgia, which are simply forms of pain, occupying certain areas, and running seemingly in the direction of certain nerves, *yield most readily to faradism.*" They claim also that the effect of *pressure* is a useful guide in selecting the proper current—that in the majority of cases where firm pressure over the affected nerve aggravates the pain, the galvanic current is indicated; and that in cases where firm pressure does not increase the pain, the faradic current is indicated. The faradic current is also most efficacious in certain forms of headache.

When the galvanic current is used in ordinary cases of neuralgia, a battery of 12 or 18 cells is used; but in rebellious cases of sciatica and lumbago, from 40 to 60 cells are sometimes required. The electrodes should be large and well wetted, but not with salt water. The applications are made daily, twice a day, and in some cases three times a day according to the severity of the case.

In *sciatica*, the positive electrode is placed over the nerve, either at its exit from the pelvis or in the rectum; and the negative electrode is applied by the labile and stabile methods over the distribution of the nerve. In recent cases from 12 to 18 cells are sufficient. The application is continued from 10 to 15 minutes. A bulbous insulated electrode is used in the rectum, and is directed to the position of the affected nerve.

In *lumbago*, the applications are made two or three times a day, at the outset; and afterwards, once a day. The electrodes are placed on each side, and strong transverse currents are used for about ten minutes at each application. The treatment may be commenced with 18 cells, and afterwards, a stronger battery used if necessary. A single application may give decided, though perhaps temporary relief; but in many cases perseverance is necessary.

In *cervico-brachial neuralgia*, the positive electrode, large and well wetted, is placed over the cervical plexus, and the negative is passed slowly over the shoulder, arm and forearm. The applications are made daily, and continued for 8 or 10 minutes. In recent cases 12 or 18 cells are used, but in old cases 24 or 36 cases may be necessary.

In *facial neuralgia* the positive electrode is applied to the painful part, and the other to the back of the neck, or on the stomach or held in the hand of the patient. In using the galvanic current about the head or face, great care must be taken not to interrupt the current abruptly. The number of cells used should be determined in each case by the sensations of the patient; it should not be strong enough to cause pain but strong enough to cause a warm, tingling sensation. The faradic current is also useful in facial neuralgia. It may be applied with the hand of the operator. The patient takes the negative electrode in both hands, and the operator taking the positive in his left, makes the application with the fingers of his right hand.

In the epileptiform variety of this affection, galvanization of the brain and cervical sympathetic may be tried. It has been successful in relieving "a certain proportion" of these terrible cases.

In *headache*, the best results according to Beard and Rockwell, are obtained from the faradic current, applied in the form of general faradization—the negative electrode being applied to the feet or coccyx, and the positive to the head, back of the neck, and in some cases to the stomach and bowels as well. The current is applied to the head with the hand of the operator. In some cases central galvanization is found to be the most efficacious. General electrization is useful in preventing attacks of headache by the improvement which it imparts to the tone of the system.

In *pain of the stomach or bowels*, the best results are obtained from central galvanization—the positive electrode being applied to the back of the neck, just above the 7th cervical vertebra, and the negative to the part or parts affected. Dr. Bartholow applies the positive pole to the cervical sympathetics and pneumogastrics (behind the angle of the jaw) and to the dorso-lumbar enlargement of the cord. He also applies the positive pole to the rectum by means of an insulated electrode. In some cases he uses the faradic current—"a mild current for anodine effects, and a strong current to the dry skin as a counter-irritant."

DISEASES OF THE SKIN.

Dr. Althaus, in the third edition of his treatise on "Medical Electricity," published in 1873, devoted but a single paragraph to the electric treatment of skin diseases. It is as follows: "Dr. Beard has used his proceeding of 'central galvani-

zation' in certain diseases of the skin, such as prurigo, eczema, and lichen, with good results, without an application to the diseased surface. In obstinate cases of this kind, therefore, which do not yield to other treatment, galvanization deserves a trial."

Dr. Bartholow says that very brilliant results have been obtained from galvanism in the treatment of trophic affections of the skin. He employs galvanism with success in the treatment of *acne* (acne vulgaris). One electrode is placed in front of the ear and the other is passed over the eruption on the face, without reference to the direction of the current. From 5 to 10 cells are used. Scleroderma is also reported to have been cured by galvanism. In one case the positive electrode was placed on the spine, the negative applied to the diseased surface, and from 12 to 27 cells used. In using central galvanization in the treatment of diseases of the skin, Drs. Beard and Rockwell use a current from 12 cells. The negative electrode, large and well wetted, is placed over the stomach, and the positive electrode is applied to the head, neck, and the entire length of the spine. It is also applied to the cervical sympathetic on both sides, care being taken not to break the current abruptly. Electricity is also used for the relief of the pain of herpes, and the itching of prurigo. A mild galvanic current is used for the former and dry localized faradization for the latter. For anæsthesia, the faradic current and the dry metallic brush is used.

(To be continued).

THE OPHTHALMOSCOPE IN THE DIAGNOSIS OF BRAIN DISEASE.

BY W. F. COLEMAN, M.D., M.R.C.S. ENG.,

Surgeon Eye, Ear and Throat, St. John, N.B.

(Read before the Canada Medical Association at Halifax, August 4, 1881).

MR. PRESIDENT AND GENTLEMEN,—Our knowledge of the physiology and pathology of the central nervous system is so limited, the diagnosis of brain lesions so difficult, the well-known conditions of the eye in those lesions so unmentioned or dubiously mentioned by the text-books on medicine, as to furnish me with some excuse for urging the claims of the ophthalmoscope in the study of the intra-ocular end of a brain nerve during its structural changes and in the diagnosis of diseases of the brain and cord. Though the matter may embrace a limited personal experience, and little originality, I freely admit the testimony of such authorities and special writers as Drs. Allbut, Jackson and Gowers, and Mr. Nettleship, and, incidentally, many others. While the nature of many diseases within the chest and abdomen is revealed to touch and the ear, the maladies of that most inaccessible part of the body—the cranium—give out no certain sound, and will not disclose themselves to any wizard's touch; so it remained for the genius of VonGraefe and Sichel, the patient, skilful labors of Sæmisch, Liebreich, Schweigger, Sœlberg-Wells, Jackson, Allbut, Gowers, Hamilton and others to illuminate with the ophthalmoscope the dawning light through which men were eagerly striving to discover the nature and situation of intra-cranial diseases.

The popular idea that the oculist has, and perchance *needs*, no knowledge of general medicine to successfully treat the eye, is no less false than the, I fear, professional belief that the general practitioner can gain little from the ophthalmoscope. With the herculean task of acquiring a fair knowledge of the structure, working, derangement and repair of the general system, it is not to be expected that even a Hercules could also keep abreast of the information and experience in regard to any special organ. Yet, since the whole is made up of all its parts, and the parts are interdependent and dependent upon the whole, any approach to a comprehension of the whole organic system must involve some familiarity with every part. No more striking illustration of this can be cited than the evidence of cerebral lesions that may be elicited by an ophthalmoscopic examination of the intra-ocular end of the optic nerve, called the optic disc or papilla. In the pre-ophthalmoscopic period (prior to the great invention of Helmholtz in 1851), there certainly had been something done to trace the connection between amaurosis and brain disease in atrophy of the optic nerve, but a meningeal inflammation propagating itself along the optic nerve as a descending neuritis had not been thought of; and the cause is not far to seek, for in brain disease, accompanied by very considerable optic neuritis, the sight may be perfect, hence disease of the optic nerve was unsuspected. It thus happens that many patients having symptoms of brain dis-

ease, with some lesion of the optic nerve, have, on account of perfect vision, no disposition to consult an oculist, and while so few men in general practice use the ophthalmoscope, one most important sign of encephalic disease will be frequently overlooked. As the optic papilla is the chief intra-ocular part concerned, and furnishes the most palpable and constant information in intra-cranial disease, let us briefly consider the anatomy of the optic nerves. Under the name of the optic tracts, they take their origin just in front of the cerebellum, in the tubercula quadrigemina or optic lobes to which visual perception is attributed, also in the corpora geniculata; they then pass forward along the under surfaces of the crura cerebri, taking on their way some fibres of origin from the optic thalami and reaching the olivary process of the sphenoid, just under the floor of the third ventricle, unite to form the optic commisure or chiasma. The distribution of the fibres of the chiasma sometimes enables us to fix the site of lesions interfering with vision, *e. g.*, the right tract supplying optic fibres to right half of each retina, and the left tract fibres to the left half of each.

As the optic nerves pass forward from the chiasma they receive at the optic foramina a loose sheath, from the dura mater, which becomes lost in the sclera. The nerve is about $\frac{1}{8}$ of an inch in diameter, before it perforates the cribriform plate of the sclera, and contracts to $\frac{3}{4}$ of this diameter at its intra-ocular end, where it spreads out to form the internal layer of the retina. The nerve is also invested by a second close fitting inner sheath, which is continuous with the pia mater, and sends processes between the nervules of the optic bundle. Between this inner and the outer sheath is the vaginal space of Schwalbe, which is continuous posteriorly with the arachnoid space of the brain, and anteriorly within the posterior part of the sclerotic opening, is by some, said to be continuous with lymphatic spaces in the substance of the optic nerve, by others to be closed. Evidently the vaginal space may become distended by sub-arachnoid fluid, for there is *not* a reflection of the arachnoid at the optic foramen to prevent it. As the internal carotid artery emerges from the inner wall of the cavernous sinus, it gives off the ophthalmic artery, which after passing through the optic foramen gives off the arteria centralis retina; this enters the optic nerve, runs forward in its substance, perforates its disc near its centre, then subdivides and radiates to its distribution in the retina. The retinal venules, converging, unite to form the two venæ centrales, which pass out through the disc near the artery and in the nerve trunk unite to empty into the ophthalmic vein, which passes through the sphenoidal fissure and empties into the cavernous sinus.

Further and most important to the subject, the blood supply to the optic nerve and disc is according to Galezowski, independent of the ophthalmic artery (which more particularly supplies the retina) being part of the vascular system of the brain. He describes a posterior optic artery to the testes; a a middle optic from the choroid plexus to the geniculata; and anterior optic from the middle cerebral to the optic tract; and capillary branches from the pia mater to the chiasma.

The appearance of the optic disc, the first time I discovered it with the eye mirror and a $2\frac{1}{2}$-inch lens, struck me as resembling a cream-rose full *moon*, about the size of a large split pea, rising in a pink sky of surrounding choroid, which, by its contrasting color, gave a well-defined sharp border to the disc. The retinal vessels radiate irregularly from the nasal side of the centre of the disc, the larger branches, passing upward and downward, completely avoiding the temporal sides.

The changes in the disc produced by cerebral and spinal diseases are—*Congestion*, *Inflammation*, and *Atrophy*. The congestion of the disc may be a simple hyperæmia; if attended by œdema, it is the stanungs papilla of VonGraefe, the "choked disc" of Allbut, or ischæmia of the disc, or congestion papilla. In intra-ocular neuritis, or, as it is called, papillitis, the papilla alone may be affected; in other cases, the neuritis occupies the length of the optic nerve, as has been shown in autopsies by Allbut, Hulke, Virchow, etc. Atrophy of the disc may be primary or simple, or it may be consecutive as a consequence of papillitis. Authorities are in accord as to the great frequency of *optic neuritis* in intra-cranial disease. Annuske and Reich collected 88 cases of intra-cranial growths with ophthalmoscopic examinations and autopsies, and found ophthalmic changes in 75 per cent. By common consent, the most frequent cause of optic neuritis is intra-cranial tumor; next to it, meningitis. Cerebral abscess and softening are occasional causes, and hæmorrhage a very rare one. Tumor is nearly

always attended by optic neuritis (Hughlings-Jackson). Allbut writes: "My own opinion certainly is that changes either of a congestive, neuritic or atrophic character may be found in the discs at some time or other in the course of almost all cases of intra-cranial tumor." "From my own experience (Gowers) I should say that neuritis occurs in about four-fifths of the cases of intra-cranial growths." Encephalic disease may also manifest itself through paresis or paralysis of the ocular muscles, producing squint and double vision. That optic neuritis may possess diagnostic significance of brain lesion, the extra-cranial causes which produce, or are associated with, neuritis must be borne in mind, such as albuminuria, lead poisoning, the exanthemata, suppression of the menses, pernicious anæmia, loss of blood, exhausting diseases, neuralgia of fifth nerve, in rare cases secondary syphilis (Nettleship), and tumors in the orbit. It may occur idiopathically without obvious cause (Gowers). Sinple *congestion* or *hyperæmia* of the papilla very commonly precedes atrophy. It is sometimes the expression of a state of congestion and degeneration of the whole optic nerve, but sometimes apparently limited to the disc (Gowers). It frequently is the first stage of tobacco amaurosis, the last being atrophy.

Choked disc, or *hyperæmia with œdema*, is the first stage of neuritis, and frequently associated with it. Its principal causes are said to be the same as produce neuritis, viz., tumors, meningitis, and hydrocephalus.

Primary atrophy of the disc is more frequently associated with locomotor ataxy than with any other disease. Often I have seen it occur without assignable cause, and once from a blow on the eye. Galezowski gives a table of 166 cases, embracing the causes of primary and consecutive atrophy.

Cerebral causes	40
Locomotor Ataxy	33
Traumatic	22
Alcoholism	13
Syphilis	12
Other causes	46
	166

Allbut is of opinion that primary atrophy is generally due to mischief at the base (tumor), or to ventricular dropsy, which may compress and sever the nerves or tracts at some point in their course. From the evidence of Messrs. Critchett, Wordsworth and Hutchinson and others, and my own experience, I think that tobacco in excess will produce atrophy of the discs, though many deny it. To be able to distinguish between a *normal* appearance of the papilla and the inception of a pathological, much experience is required, and the attempt will soon prove the saying, "Pathology is but the shady side of physiology." A full-blown neuritis may be quite palpable to an amateur ophthalmoscopist, while an expert may be unable to decide as to a slight hyperæmia or say whether a disc is pale from incipient atrophy or decoloration. *The* indication of hyperæmia is an abnormal redness, which has a tendency to blur the edge of the disc. Comparing the eyes may give some help, and noting whether the redness increases from time to time. The signs of neuritis and choked disc are similar, and vary with the stage. In the first stage the disc is less swollen and red, and the edge, though blurred, may be still distinguished, while in intense papillitis the color of the disc is so blended with that of the surrounding choroid that it can be frequently distinguished only as the point of convergence of the retinal vessels. Impairment or loss of sight is the chief symptom in intense neuritis, though there may be marked neuritis without any impairment of sight. Pain in the eye is rare. Vision usually begins to fail first in one eye, and sight may fail completely in a few days or decrease very slowly. Restriction of the visual field is common, and color-vision may be defective. The neuritis of tumor is double, rarely unilateral. Dr. Jackson has pointed out that the neuritis often coincides in its onset with an obvious increase in the other symptoms of the cerebral tumor. It appears that neuritis is usually a late production of tumor. Dr. Jackson recorded one case in which a man had had symptoms of cerebral tumor for nine years; during the last three years his discs had been repeatedly examined and found normal; six weeks before death, neuritis was discovered.

The signs of atrophy are pallor and later depression of the disc, with shrinking or absence of the capillaries. When the atrophy is marked there is diminished vision, nearly always more considerable in one eye than the other. There is a concentric irregular marginal limitation of the field of vision. Frequently there is a defect of color-vision.

The relation of papillitis to intra-cranial disease is still a vexed question. I shall refer briefly to the principal theories. VonGraefe gave the first in 1859. He distinguished two cases. In one the

change in the disc (neuritis) was slight, with a tendency to invade the adjacent retina. In this case there was meningitis, and inflammation of the nerve trunk was found by Virchow, which inflammation was assumed to have been communicated to the optic nerve from the inflamed meninges, and to have descended the nerve to the eye. This Von Graefe designated, "descending neuritis." In other cases of considerable swelling, hæmorrhages and vascular distension of the papilla (stanungs papilla), accompanied by cerebral tumor, no signs of inflammation were perceptible on naked examination of the trunk of the optic nerve. This condition of the papilla he attributed to increased intra-cranial pressure, which obstructed the return of blood from the eye through the optic vein by compressing the cavernous sinus.

The theories of Schmidt and Manz are largely accepted in Germany. Manz showed that distension of the vaginal space around the optic nerve is frequent in neuritis, and believed the extension to be due to intra-cranial pressure or increase of sub-arachnoid fluid. Further, he found that injections into the subarachnoid space, of animals, passed into the sheath and caused fulness of the retinal veins, and in some cases transient redness and swelling of the papilla. Schmidt demonstrated that a colored liquid injected into the sheath passed into the lymph space of the nerve at the lamina cribrosa, and suggested that neuritis is produced by the irritation of the liquid passing into the lymph spaces.

A theory was put forward by Schneller, in 1860, extended by Dr. Hughlings-Jackson in 1863, supported by Brown-Sequard, and was formulated by Benedikt in 1868. It assumes that the tumor acts as a source of irritation, which has a reflex influence through the vaso-motor nerve upon the optic disc, leading to its inflammation. Of these theories, that which accounts for changes in the disc by inflammation of the meninges propagated along the nerve trunk, appears the best supported by the frequent determination upon *post mortem* and microscopical examinations of the conditions upon which the theory is based. Although neuritis may occur in tumor of any size or kind, in any part of the brain, it is rare in tumor of the convexity, while it is common in that of the base and most common in that of the anterior lobes (Russell-Reynolds). Again, *meningitis* limited to the convexity is *seldom* accompanied by intra-ocular changes, while *basilar* meningitis is *usually* attended by neuritis. In many cases of tumor, a local meningitis in the vicinity of the growth and accompanied by inflammation of the optic tract has been found. Now the proximity of this *inflammation* of the basilar meninges (whether independent or the result of tumor) to the optic tracts makes its communication to the tracts highly probable, and the fact of the so common association of inflammation of the meninges and tract increases the high probability to a seeming certainty.

A case of Mr. Hutchinson's in which no distension of the retinal veins was produced, although the cavernous sinus was completely obliterated by the pressure of an aneurism, seems to go far towards destroying the theory of obstructed blood return from the eye by pressure on the sinus. The vaso-motor theory is rejected by Leber and a numerous following, on the ground that it involves a mechanism not known to exist and a complex relation of the optic nerve to all parts of the brain difficult to conceive.

I shall now give you condensed reports of a head case and one of spinal disease, with defective sight, under my care in the St. John General Hospital, and a head case with eye disease in the general wards :—

Jan. 31st, 1881.—P. G., æt. 43, says his sight began to fail after cutting his thumb and profuse bleeding ten years ago, and since then could see to read only very large type. Sight has been the same for past three years as at present.

Vis. Right Eye=$\frac{1}{10}$=No. 15 Jæger 8″;

Vis. Left Eye=$\frac{1}{10}$=No. 18 Jæger 8″; not improved with glasses.

There is gray atrophy of both discs. Has smoked four to five pipes a day for past 23 years, and drank pretty hard for years up to four years ago, but scarcely any since. Is very nervous. Wakes in the morning with headache and sickness. Memory bad for two years past. Gait unsteady for two or three years. Walks as though he had taken a little too much. Diagnosis—Locomotor ataxy and atrophy of discs. Treatment—Stop smoking. R— Strych. sulph., gr. $\frac{1}{24}$; hypodermically and increase gradually.

March 4th.—Is getting gr. $\frac{1}{8}$ strych. Vision,

right and left, increased to nearly normal.=$\frac{1}{1\frac{1}{2}}$. R—Strych. sulph., gr. $\frac{1}{4}$. Strych. increased the staggering gait. R—Croton chloral, grs. v., and return to strych. sulph., gr. $\frac{1}{4}$. *15th.*—Discontinue strych. sulph. R—Arg. nit., gr. $\frac{1}{12}$, and increase to gr. $\frac{1}{2}$, taken daily by stomach.

April 8th.—Vis. right eye=$\frac{1}{2\frac{1}{2}}$. Discharged.

July 19th, 1878.—Mary Smith, æt. 20, single, lost the sight of right eye completely and suddenly three weeks ago. Pain came on in the brow the same day, before the sight failed, and has kept her awake most of the time since. Day before yesterday, lost the sight of left eye in the same way as the right. Has no perception of light. Pupils react very slowly to light. Has *white atrophy of both discs.* Patient very nervous, and has slight choreic movements. History—For two weeks last summer had constant pain in the top of the head, and vomited three or four times daily; denies syphilis. Family history—Lost three brothers and one sister in their first year. Treatment—Potass. iodid. grs. x., Tr. cinch. ʒj., t. d.

July 24th.—No pain in head since yesterday. Pupils widely dilated and immovable; no perception of light.

Aug. 1st.—Patient drew attention to two syphilitic ulcers on calf of leg. Diagnosis—Syphiloma at the base, implicating optic nerves. *8th.*—Vis. left eye: seeing position of window. Vis. right eye, *nil.* Stop Pot. iodid. R—Hyd. perchl. gr. $\frac{1}{12}$; Am. mur. grs. v.; Tr. nucis vom. ♏ x.; t. d. *20th.*—R—Ung. hyd. ʒss., rubbed into axilla and thigh on alternate days; Pil. hyd. grs. ii. twice daily.

Oct. 12th.—No ptyalism. R—Pot. iodid. grs. v.; Sp. am. ar. ʒj.; Tr. cinch. ʒj.; t. d. Stop other treatment. *22nd.*—Mouth very sore and mercurial fetor. Discontinue Potass. iodid. R—Pot. chlor.

Nov. 7th.—Vis. right eye, *nil;* left eye, counting fingers. *13th.*—Repeat Pot. iodid. grs. x., t. d. *25th.*—Vis. right eye, motion of fingers; vis. left eye, fingers, two feet, and sees to get about well. Left eye diverges when right eye fixes for near point. When the eyes are at rest, both look to the left.

Dec. 21st, '78, to April 9th, '79.—Patient had Strych. sulph., hypodermically, gr. $\frac{1}{24}$ to gr. $\frac{1}{8}$, when gait was made unsteady, then gradually reduced to gr. $\frac{1}{16}$. Had tenotomy of the right internal and left external recti muscles. The hands are now quiet, and patient much less nervous. Vis. right eye, perception of light; vis. left eye, $\frac{1}{2}\frac{1}{0}\frac{2}{0}$. Direction of eyes much improved, but still look slightly to left. Discharged; to take Hyd. perchl. gr. $\frac{1}{16}$, Strych. sulph. gr. $\frac{1}{16}$; t. d.

June 5th, 1881.—J. B. Hansell, æt. 53, admitted into the general ward a few days ago. He is a muscular looking man, 4 ft. 10 in. high, weight about 130 lbs. Says for the past year he has had a very dizzy head and will fall any day in the road, soon gets up and walks off. The fall was always preceded by giddiness. Six months ago began to vomit about every second day, and soon after vomited every morning if he laid in bed up to 7 o'clock. When he rose earlier the vomiting did not come on. This continued up to last week, since when he has not vomited. During the past month, has had a pretty severe pain from the forehead to the back of the head, lasting an hour or two every day and has not seen to read. Memory failing for past year. Pulse 68, small and rather weak; skin normal temp. to touch; appetite good; bowels costive; sleeps well; whistles feebly; grasp of hands weak; flexion of forearms and legs strong; gait very unsteady and seems in constant danger of falling; patellar reflex normal; no lightning pains; urine normal; right ear hears the watch only at $\frac{1}{2}$ in., ordinary loud voice at 10 ft.; left ear hears the watch only at contact, or ordinary voice at 4 ft.; speech, broken Dutch-English, probably normal; smell normal; pupils slightly dilated by atropine; vis. right eye, counting fingers, 2 ft.; vis. left eye, counting fingers, 12 ft.; ophthalmoscopic examination shows intense optic neuritis, with hæmorrhages and infiltration of retina disc.

June 25th.—Right pupil half the size of left, left pupil a little smaller than an average pupil; right pupil reacts very slowly to light, left pupil reacts more but imperfectly; percussion on the temples hurts a little, on the forehead less; head 24 in. in circumference.

July 15th.—Last evening and this morning refused to take his medicine, saying there was something in it to poison him. Diagnosis—Tumor of the cerebellum, involving the tubercula quadrigemina.

July 24th.—The patient was discharged at own request.

Gentlemen, your patience must not be further

tried; I shall only add, if on account of any words of mine the ophthalmoscope shall aid you in the diagnosis of so obscure a class of diseases as those of the central nervous system, I shall think your time not wasted and myself more than repaid for this paper.*

SULPHUROUS ACID IN THE TREATMENT OF DIPHTHERIA.

BY H. P. YEOMANS, M.D., MOUNT FOREST, ONT.

An epidemic of diphtheria commenced in Mount Forest and surrounding country about the 15th of November, 1878. During the first three or four weeks all the cases yielded to treatment, and recovery began on the third or fourth day. The following treatment was pursued. A mixture of sulphurous acid and glycerine, equal parts, was administered in doses of 10 or 20 drops every hour or half hour. Also a solution of tincture of iron and chlorate of potash (to which in some instances quinine was added) was given every three or four hours.

The temperature of the room was uniformly kept at 80°, and the air rendered moist by evaporating water continuously. December 15th, the character of the symptoms suddenly changed to those of diphtheritic croup; at the same time there was a fall of snow and the atmosphere became colder. From the 15th to the 28th of December these croupy symptoms appeared in nearly every case. They were treated by inhalations of carbolic acid and iodine, with warm vapor. During these thirteen days eight very severe cases were treated, one of which died. In the case that ended fatally, the temperature of the room which the patient occupied was not equably maintained, the thermometer ranging by irregular variations from 60° to 85°, owing to great carelessness on the part of the attendants. In two cases emetics were administered, with apparent relief for a few hours; one of these was a boy of 12 years of age, possessed of a weak nervous temperament and a constitutional predisposition to scrofulous affections. The croupy symptoms continued in this case from the morning of the 20th until the morning of the 23rd, after which they disappeared. The most scrupulous care was exercised by those having charge of this patient, in administering remedies, nourishment and in maintaining a uniform temperature. The sanitary condition of the room occupied by the patient was also excellent in every respect. Convalescence was fairly commenced in ten days after the attack began.

In the case of a little girl 10 years of age, some peculiar symptoms presented themselves. The diphtheritic membrance covered the uvula, tonsils, fauces, and extended over the roof of the mouth into the nasal passages, and some patches also appeared on the lips. The tonsils were so swollen as to render deglutition impossible. This state of affairs continued four days. During this time the bowels were obstinately constipated and enemata acted very inefficiently. On the eighth day the membrane became loose on the roof of the mouth and gradually peeled off, leaving an ulcerated surface exposed. This ulcerated surface was extremely sensitive, and every effort made to take cold water or nourishment caused intense pain. The pain extended to the ears; sometimes it commenced suddenly and assumed a neuralgic character, without any apparent exciting cause, lasting for an hour or two, after which it would suddenly cease entirely. This intense pain continued at irregular intervals for five days and then suddenly disappeared. In this case the patient determinedly resisted all attempts to administer any remedies, and resisted so successfully that very little could be done to check the disease.

The treatment pursued during this epidemic in 1878 has been strictly adhered to ever since, with the most gratifying results. Diphtheria is very prevalent here during the fall and winter months. The drainage of the town is imperfect, which may account for its prevalence. Unfortunately, the centre of the business portion is lower than the surrounding parts, and consequently all the water flows down the gutters to the central part. From this point it is conveyed by covered drains across two blocks and allowed to remain in a half stagnant condition, until evaporation and soakage into the loose soil disposes of it. This part of the town is now being built up with residences.

As diphtheria is very common here, we have had ample opportunities to test the value of the treatment I have mentioned. It has succeeded so well that I feel it my duty to unhesitatingly recommend it to all who feel disposed to give it a trial. The objection to using a brush in applying any

* This article has also been published in the Can. Med. and Surg. Jour.

remedy to the tonsils, is that the local application is unpleasant to children, difficult for the attendants to perform properly, and the brushing—even with a camel's hair pencil—irritates and sometimes causes an abrasion of the tender or partially ulcerated surface attacked by the diphtheritic membrane. These abrasions are well known to be the favorite soil on which these microscopical vegetable parasites delight to fasten, and on which they flourish. Therefore any remedy which can be applied efficiently without using a brush, is best. Glycerine is the best vehicle in which to administer sulphurous acid, because it is soothing and forms a protective covering over the tender diseased surface of the throat. When given in 10 or 20 drop doses, it retains the sulphurous acid in the fauces, so that its specific effects may be obtained. This mixture frequently repeated and given without any water, is constantly retained and acting remedially in the throat. As sulphurous acid is very volatile, it penetrates the nasal passages, operating there also quite as efficiently. I have only met with one case in which a child refused to take it, whose case I have reported with neuralgic symptoms. Numbers of cases have been treated here with no other remedy, and when any other has been used in my practice, it is the potassium chlorate and tincture of iron mixture, to which I alluded before.

PHENYLE AS A DISINFECTANT.

BY W. S. CHRISTOE, M.D., FLESHERTON, ONT.

About a year has transpired, since my attention was drawn to this substance, by R. Wightman, Esq., druggist, of Owen Sound, and who is one of the Canadian agents for it. It has undoubted qualities as a disinfectant, quite as good if not superior to carbolic acid for general purposes, requiring a smaller quantity to produce better results. Dr. C. Barnhart also testified to its undoubted properties as a therapeutic agent in malignant diseases, such as diphtheria and scarlatina maligna, using it as a gargle. I was induced to try it in extensive wounds and as a general disinfectant, and have not been disappointed. Here are a few cases in point :—

J. T., æt. about 50, who several years ago was badly frost-bitten in the foot, so much so, that from time to time the phalanges of the toes were dissected out, the other bones of the foot became diseased—it was certainly in a very bad condition, causing him continuous pain, with large quantities of morbid looking pus escaping. Septicæmia was evidently doing its work, for he became constitutionally sick. The question of amputation had to be decided ; the patient urged it at once, but I could see nothing but disaster unless I succeeded in rallying his system. I suggested delay and applied myself diligently to build him up ; partial success was the result. At length the case became so urgent, the foot was amputated, and sufficiently above the ankle to secure a good flap from the anterior part of the leg. Everything appeared satisfactory, the shock was not so great as expected, and I began to flatter myself with the success achieved. But it didn't stay in that condition ; for although I had taken the precaution to allow a proportionately long flap for the emaciated leg, I began to fear I would soon have none at all ; it sloughed extensively and was exceedingly unhealthy. At this point, phenyle was used, one tablespoonful to the pint of cold water, forming a milky solution. This was applied unremittingly, and with constitutional treatment, in a brief period healthy pus manifested itself, so that after all the contretemps, a good stump was the result ; my patient made a rapid and successful recovery.

Another case was a child with necrosed bone. Inflammation of the tibia took place two years ago, and what occurs sometimes, and is curious, occurred in this case : another bone, the clavicle, was inflamed at the same time. Operation was desired and was performed by myself and an assistant. After applying Esmarch's bandage, an incision was made the whole length of the shaft, and the new growth encasing the old bone was chipped out the whole length of the incision, sufficiently to allow the removal of the dead bone. In this case I also used phenyle and found it equally efficacious for a good recovery.

A few cases of minor operations, such as compound fracture of finger and amputation thereof, are the sum of my experiments with it. In all, however, I placed every confidence in it, and was not disappointed. It deserves an extensive trial.

"Those who in the study of the sciences do not consult nature, but authors, are not the children of nature ; they are only her grandchildren."—*Da Vinci.*

Reports of Societies.

HURON MEDICAL ASSOCIATION.

The regular quarterly meeting of the Huron Medical Association was held in Wingham on the 4th of October, Dr. Sloan, president, in the chair. The following members were present.—Drs. Sloan, Holmes, Worthington, Tamblyn, Bethune, Graham, McDonald, Gillies, Young, Duncan, Mackid, Hurlburt and Stewart.

Dr. Mackid showed a woman, æt. 65, who has an abdominal tumor, occupying a great portion of the right abdominal cavity. She first noticed it 4 months previously. Its true nature was not decided on.

Drs. Stewart and Hurlburt showed the following cases :—

1. A case of *Locomotor Ataxia*. The patient is a man, æt. 43. He was first seen on the 5th of September, when he complained of pains in his legs, thighs, arms and belly, and of an inability to walk in the dark. He had gonorrhœa 20 years ago, but he never had syphilis. The pains first troubled him 12 years ago, while he was working in the lumber woods of Wisconsin. His occupation was that of a driver, and he had to sit for hours on the cold logs, and it is to this cause that he attributes his trouble. The pains have been gradually getting severer. For nine months he has been unable to work. The first difficulty in walking was noticed five years ago.

Present state.—There is no loss of motion. The sensation of the lower extremities and that part of the left arm supplied by the median nerve is markedly delayed. He requires from six to eight seconds to appreciate a painful sensation in these parts. Simple brushing of the hair of the legs causes more pain than severe pinching. He is able to tell a hot from a cold application. When his eyes are shut, he is unable to touch his nose with either index finger. Neither can he point correctly to the position of his feet. There is complete absence of the knee reflex. There is no ankle clonus. He says that he is able to retain his urine for 48 hours, without causing him any inconvenience. When he attempts to empty his bladder, he is compelled to strain. Bowels move about once in three days regularly. The pupils contract to light slowly. The reaction to accommodation is normal. There is no contraction of pupils, squinting, or loss of color vision. There is distinct atrophy of both discs. Vision is fair. He at times complains of severe pains in the stomach. He says that he has a feeling as if 100 lbs. weight was compressing his back. He is unable to stand or walk with his eyes closed.

A full clinical account of this case, with a detailed description of the effects of stretching the right sciatic, which operation was performed since the meeting of the Association, will be reserved for a future occasion.

2. A case of probable tumor of the left cerebral motor region.

The patient, a girl, æt. 14½ years, was first seen in January, 1880, when she complained of loss of vision in the left eye and headache. Family and personal history good. No syphilitic or tubercular history can be made out. Father and mother both in good health. She was quite well up to three years ago, when she was seized with headache—confined to the left parietal region—and vomiting. After these symptoms had been present for about three weeks, she noticed that she had lost completely the sight of the left eye. The headache and vomiting left shortly afterwards, but have recurred frequently since. The following was her condition in January, 1880:—She is medium sized, spare, and listless looking ; cheeks flush frequently. The pulse is 90 and temp. normal. There is nothing abnormal to be discovered about the heart, lungs, liver, or spleen. Her appetite is poor, and the bowels are costive. Abdomen retracted. Marked tache cerebrale. *Left eye*—Slight upward and internal squint. The arteries of the fundus are small and have no white lines accompanying them. The disc is greyish white, small and cupped. *Right eye*—The disc is larger and of the normal color, but there is some cupping. Vessels small. Fundus otherwise normal. The media are normal in both eyes. The sight of the right eye is good. Left pupil is dilated, right is normal.

From this time (Jan. '80), for a period of about four months, she took pot. iodid. grs. xxx. daily. Shortly after commencing the iodide, the headache disappeared and has not returned. About five months ago, right hemiplegia set in, and at the present time, the right arm is completely useless. She is able to walk, but drags her right leg considerably in doing so. Both hemiplegic limbs are

atrophied. There is no rigidity. The right knee reflex is greatly exaggerated.

Drs. Stewart and Hurlburt also showed the fragments of a phosphatic stone, weighing two ounces, which they removed from the bladder of a girl, æt. 16. The stone had formed around a hairpin which had been introduced 18 months previously.

Dr. Graham, of Brussels, showed a man, 50 years of age, who has apparently recovered from both a psoas and lumbar abscess, depending on disease of the dorsal vertebræ. For several months this patient has been troubled with catarrh of the bladder and bacteruria. The fresh urinary deposit is composed principally of pus cells and bacteria termo. For this condition he has been taking, with great benefit, eucalyptus internally, and injections into the bladder of the disulphate of quinine.

MICHIGAN STATE BOARD OF HEALTH.

(Reported for the Lancet).

The regular quarterly meeting of this Board was held October 11, 1881. An interesting feature was a report by the Secretary relative to work of other State Boards of Health. The Secretary of the Michigan Board desires to continue to receive information from other Boards, by which these reports may be made quarterly.

A report relative to work of local boards of health showed increased activity on the part of local health authorities, in the way of isolating those infected with communicable diseases, and enforcing the law, requiring from householders and physicians notices of such diseases. In one city a physician had been fined $100 for not reporting cases of diphtheria.

The revised document on the restriction and prevention of Scarlet Fever was adopted, and ordered to be published in English, Dutch, and German. The consideration of this document involved a discussion of the question of recommending health officers to verify diagnoses of reported cases of diseases dangerous to the public health.

A circular, giving general rules for the prevention of diphtheria, scarlet fever, and small-pox, was adopted. Forms were adopted for annual reports by health officers and clerks of local boards of health, and by regular correspondents of the Board.

Dr. Avery, of Greenville, was requested to visit the overflowed district along the Maple River, in Gratiot county, and report to the Board.

Dr. Lyster, of Detroit, read a paper on "Syphilis in its relations to the public health." It dealt with the facts of the frequent communication of the contagium of syphilis, by direct and by indirect means, to innocent persons; also with the serious effects on individuals, and on the offspring of marriages where one of the parents is thus blighted. He believed much might be done toward preventing this loathsome disease, by wise legislation which shall restrict syphilis, and especially by collecting and disseminating among young men and other people, facts relating to the nature and dangers of this disease.

Dr. Kellogg read a paper on the "Relations of Preventable Sickness to Taxation," showing by the reports of the board of correction and charities, the abstracts of reports of county superintendents of the poor, the abstracts of statistical information relating to the insane and the deaf, dumb, and blind, and the Vital Statistics reports, that more than 3,000 persons in Michigan are annually dependent on the State for support to a greater or less extent, in consequence of diseases preventable by the adoption of proper sanitary measures. The cost to the people of the State for the support of these persons is over $40,000 annually, a portion of which is paid by every tax-payer. This is but a small part of the actual loss to the State. The number of deaths from preventable sickness in 1880 *(estimated* from returns by supervisors and assessors) was 4,585. Placing the value to the State of each human being at the low estimate of $1,000, the aggregate loss by deaths from preventable sickness is over $4,500,000. But to this must be added a further loss from sickness which did not terminate fatally. The statistics of the benefit societies of England show that, for every person who dies, two persons (on the average) are sick throughout the year. This indicates a total annual loss of time from preventable illness on the part of more than 9,000 persons, to which should be added the expense of living, etc., certainly more than $1,000,000. This gives about $5,666,000 as the total loss to this State from diseases generally conceded to be preventable. These figures are regarded as much too small, because of the few diseases included in this estimate as preventable (though it is generally conceded by sanitarians that at least nine-tenths of all ailments may readily be prevented), and because only sickness and

deaths directly traceable to preventable causes have been included, while a large amount of sickness and many deaths are indirectly due to these causes. It is probable that preventable sickness might justly be charged with an expense to the State of not less than ten million dollars. Estimating the loss in other States in the same ratio to the population, the aggregate loss to the whole United States is not less than three hundred million dollars annually, an amount which would pay the national debt in six years.

Mr. Parker, of Flint, presented a report of the Public Health Section of the American Social Science Association at Saratoga.

The committee on sanitary survey of the State was requested to prepare schedules for the sanitary survey of cities, villages, and townships.

Mr. Parker reported a proposed bill, authorizing all boards of education to exclude from school, persons infected with diphtheria, scarlet fever, or small-pox, or living at houses where any person is infected with one of these diseases.

The Secretary was directed to prepare and issue a weekly bulletin of sickness in Michigan, for such papers and medical journals as will publish it.

Dr. Baker was authorized to procure the services of an architect, in the preparation of a circular on hospitals for communicable diseases.

Dr. Kellogg reported on the subject of criminal abortion. He and Dr. Hazlewood were requested to prepare a circular, designed to collect facts on this subject.

TORONTO MEDICAL SOCIEEY.

October 6th. The Society met at 8 o'clock, the president in the chair. The minutes of the last meeting were read and confirmed, and Dr. Robinson proposed as a member of the Society.

Dr. Oldright presented the fœtus and placenta taken from a patient supposed to have miscarried about the fifth month. The fœtus was of very small size, and the placenta had undergone fatty degeneration; the smallness of the fœtus was thought to be due to the fatty condition of the placenta. The amnion was adherent to the body of the fœtus. The same gentleman also showed a placenta taken from a case of premature birth, at the seventh month. There had been considerable hæmorrhage prior to the birth of the child, and the placenta presented on its uterine surface two large clots, which appeared to have been formed at different times. The child was still-born and presented the condition of rigor-mortis; the cause of the separation of the placenta could not be accounted for.

Dr. Burns then related a case of "Pruritus Hiemalis," as described by Dûhring. It is a neurosis and attacks principally the arms and thighs, and is a disease of cold weather, hence its name. The treatment is by glycerine, vaseline, and the Turkish bath.—The Society adjourned.

October 27th. The Society met at 8.15 p.m., the president in the chair. The minutes of the last meeting were read and confirmed, after which Dr. Robinson was elected a member of the Society.

Dr. J. S. King showed a pessary which had remained in the vagina for four years. It was bound down on the right side of the uterus by a fibrous band about three-quarters of an inch in width. The pessary was divided and removed.

Dr. Workman mentioned a case of acute mania, occurring in a patient who had an incrusted pessary in her vagina.

Dr. Cameron exhibited a case of "Paralysis Agitans," affecting the right upper and lower extremities, in a patient æt. 67; the trembling was of three years' duration, and increased upon excitement or voluntary motion. In reply to a question, Dr. Cameron thought that there was no definite or constant pathological change in this disease, but that it was a functional disorder.

Dr. McPhedran then showed a case of albuminuria and dropsy in a boy æt. 18; the disease was of eight weeks' duration. The patient when examined at the Society, presented the following conditions: anæmic and generally œdematous; the abdomen enlarged, partly due to ascites and partly to tympanitis; apex beat of heart under left nipple; splenic enlargement, and slight enlargement of some of the lymphatic glands; urine contained granular and epithelial casts, and the voice was lost beyond a whisper.

Dr. Graham, after describing the hæmacytometer, examined the blood of the patient under consideration, which showed no increase in the white corpuscles, but a diminution in the red ones. Dr. Reeve examined the eyes, and found receding slight optic neuritis and a small hæmorrhage.

The Society adjourned.

Selected Articles.

CLINIC ON INTRA-THORACIC TUMOR, EMPYEMA, AND BILIARY CALCULI.

FRANCIS DELAFIELD, M D., N. Y.

GENTLEMEN,—You hear this young man's history—that he is 21 years old, and that for the past 13 or 14 months he has been complaining of pain in the head of a peculiar character. This pain comes on after exertion and after stooping, and he refers it to the frontal region ; it is dull and throbbing in character, and is accompanied by a feeling of unnatural fulness in the head and face. It continues for about half an hour, after which time, if he keeps quiet, it disappears. He also complains occasionally of a pain in the left side which is excited by coughing, but which is not severe. He complains, too, of dyspnœa on exertion, and of difficulty in swallowing. He says his face is constantly fuller than it used to be, but he has not observed any particular change in it from month to month. His appetite is good ; he seems to be well nourished ; he has had no œdema of the feet or of the legs ; he sleeps well at night. His main symptoms seem to be his cerebral condition.

You notice that even the little exertion he makes in taking off his shirt changes the color of his face ; the color is more livid, the lips are darker, the whole face is suffused and a little swollen from that slight exercise, and as I stand near him I can see that he breathes with a little more difficulty than he did. There is, too, a fulness of the neck, and the veins of the neck are more prominent than they should be. The upper part of his chest and the arms are larger and out of proportion to the rest of the thorax.

You notice that there is a well marked difference between the percussion note on the right and left sides of the chest ; there is on the right greater dulness than on the left side, and this dulness extends from the clavicle all the way down until it becomes continuous with the liver dulness. This dulness also exists behind the upper part of the sternum. On the left side the resonance remains fair. The breathing is peculiar over both lungs ; it is not like the breathing of people in general ; it is louder, and the quality is changed. It is that kind of breathing which exists when something presses upon the trachea or a bronchus—a hard, rude respiration. The voice is a little louder on the left side than on the right. Such are the physical signs in front. The heart sounds are normal. There is a little dulness over the upper part of the right lung behind, as compared with the left, but over the lower part the resonance is good enough. There are also creakings of pleural adhesions over the right lung behind, and to a less extent on the left side. The voice sound is louder than it should be over both lungs, especially over the upper part, and it is changed in quality, being somewhat of a bronchial character.

Now, what is the matter with this man ? "Aneurism." Well, aneurism, of course, would be capable of producing the interference with the venous circulation ; it would be capable of causing the difficulty in swallowing ; it would be capable of causing the dyspnœa ; but it would have to be an aneurism of very large size to give us the diffuse dulness which we have over the whole of the right side of the chest in front, and over the sternum. It is not a circumscribed dulness, but it is a dulness involving the whole of the anterior portion of the right side. So that, although aneurism is quite a proper thing to think of in this case, I think we will have to look farther than that.

"Enlarged bronchial glands." That again would be possible, but when you say enlarged bronchial glands you would have to mean something more than that in order to cover the large sized tumor which is evidently there. There is a form of tumor which begins in the glands, and it may begin in the bronchial glands, which is called lymphadenoma or lymphoma, and which grows to considerable size ; but, although it originates in the glands, it does not remain confined to the glands ; it grows like a new growth, and infiltrates all the surrounding tissues, and thus forms a tumor of considerable size. In a person of this young man's age, without enlarged glands anywhere else in the body, we would hardly expect to find a simple enlargement of the bronchial glands to form a tumor of so great a size as evidently exists in his thorax. "Pleurisy with adhesions." No ; pleurisy with adhesions would not give us the pressure signs which we have here—pressure upon the descending vena cava, upon the œsophagus, and upon the trachea. There can be no question, I think, that there is a tumor in the right side of his thorax ; a tumor of considerable size, which began about the centre and then extended upward and downward. The tumor not only gives us dulness in this region, but it also presses upon the œsophagus, upon the trachea, and upon the vena cava, so that it is evidently a tumor beginning about the centre of the thorax to the right side, and the question simply is, what is the character of this tumor ? I should think it pretty evident that it is one of two things : a tumor starting in the bronchial glands, or in the pleura. Most of the solid new growths which we find in the thoracic cavity seem to originate in either the lymphatic glands, or in the serous membranes, usually the pleura. The tumors which start in the bronchial glands are usually composed of a structure like that of the original gland ; they are made up of a connective tissue stroma, containing cells like the cells of the normal lymphatic gland. But they do not grow like a simple benign new growth ; there is

first an enlargement of the glands, and then a diffuse infiltration, the new growth extending to, and infiltrating, all the surrounding soft parts, and in that way tumors of very considerable size are sometimes formed. The disease may begin in the thorax and extend to parts around the trachea, so that it may make its appearance in the neck as tumors of considerable size, and indeed the tumors sometimes begin in the neck at the same time that they make their appearance in the thorax, thus developing from the beginning in both the region of the neck and thorax.

The tumors that grow from the pleura have a much more difficult anatomy to analyze. They resemble in their anatomy a good deal the tumors which grow behind the peritoneum; they are difficult to classify. We hardly know, sometimes, whether to put them with the class of carcinoma or with the class of sarcoma. They also reach a considerable size; they may fill up nearly the whole of one side of the thorax. I think it probable, judging from the position of the tumor in this man's case, and from the earliness of the symptoms of pressure upon the vena cava, that the tumor probably did have its origin in the bronchial glands, and has been gradually extending from them ever since.

[Patient sent out]. The prognosis is such a case is altogether bad. The man will evidently die from the disease, but we cannot tell how soon death will take place. In some cases the tumor grows pretty rapidly, and the patient dies within a moderate length of time; in other cases the tumor grows very slowly; the adjacent viscera seem to accommodate themselves to the presence of the tumor to some extent, and it is astonishing how long such patients will continue to live. In the case of this young man it has gone 13 or 14 months, he tells us, and apparently he is not very much worse off now than he was several months ago, so that it is possible for him to continue to live for months, and even years. That will depend partly upon how rapidly the tumor grows, and partly upon how rapidly the pressure symptoms develop. Some of these patients die more especially from pressure upon the trachea; the dyspnœa becomes more and more intense; they have dyspnœa not only on exertion, but they begin to have spasmodic attacks of dyspnœa; an inflammatory process is set up in the trachea which extends to the bronchi, and to the lungs, and they get up a broncho-pneumonia from which they may die. In other cases they die apparently simply from the extreme dyspnœa. In other cases pressure upon the œsophagus may interfere with nutrition, and possibly finally lead to death by exhaustion or starvation. I remember of one such patient dying from strangulation by the lodgment, I think, of a piece of bread in the larynx. He could not swallow it, and died suddenly from that cause.

EMPYEMA.

This boy, about four years old, was sent here, with an account of his case, by his physician. The physician states that in January, 1879, the child was attacked wirh pleuro-pneumonia, which went on to become chronic. His physician first saw him in June of that year, when he was still suffering from the physical and rational signs of pneumonia on the left side. It got better, the boy disappeared from his observation until May, 1880. During this time he had been cyanotic; had had dyspnœa; had had fever, sweating and chills. He was aspirated three or four times in June, 1880, and pus was drawn off. In July a free opening was made, but it was difficult to keep it open. In September a counter opening was made in front, and a soft rubber drainage tube was inserted in front and behind, and the pleural cavity freely washed out by the mother with a weak carbolic acid solution. By December, 1880, the child was apparently perfectly well.

We will see, then, what condition his chest is in now. The boy is a pretty stout little fellow now, you observe. The left side is a little smaller than the right, though not much; the chest is pretty nearly symmetrical. The resonance is not quite so good on the left side as on the right; still, there is a fair amount of the pulmonary quality. There is a little dulness; the breathing is also good over the left side, although it is not quite so loud as on the right side. The heart is in its natural position. That, then, is an exceedingly satisfactory termination of a case of empyema, and it shows us what we have occasion quite often to observe, how much less severe a disease empyema is in young children than in adults. Such a recovery from empyema in the adult is a thing we very seldom can hope for, and very seldom get; but in children the prognosis is altogether different. A child may be very sick from empyema, and yet after the pus is removed thoroughly the prognosis is quite good; not only will the fluid be removed from the pleural cavity, and the pleurisy cease, but the lung will expand, and there may, as in this child's case, be no deformity; there may be no retraction of the chest wall. I see no reason why the left side should not, as the child grows up, become as fully expanded as the right, and there remain no apparent deformity except the scars resulting from the operation, to indicate that the child ever had empyema.

BILIARY CALCULI.

This man, gentlemen, says that about two years ago he was taken with a colicy pain about the stomach; that it went away and returned again after six months; and that during the past eight months he has had some pain nearly all the time. The first attack lasted about an hour; the second attack perhaps a shorter time; and during the past eight months he has had pain from time to time, all the

the time. the intervals being sometimes a week or more, and more lately he has had some pain every day. He says he has a sort of premonition of it before it comes on; a dull, heavy feeling, which gradually grows worse, and extends around from the stomach to the back. When the attack of pain is unusually severe he cannot catch his breath, cannot breathe easily. He says that sometimes when these attacks come on he feels sick at the stomach, and vomits some bile, and is then relieved. When I asked him whether he lost flesh and strength, he replies that he dieted himself for a while, hoping thus to relieve himself of this pain, but it did not, and he went back to hearty meals again; and while dieting himself he lost some in flesh. Aside from that it has not seemed to affect his general condition particularly. His business is that of a book-seller, and he has been able to attend to it until the past three weeks. Neither he nor his friends it seems have noticed any yellowness of the skin or conjunctiva. His bowels are regular, and so far as he knows his stools present a natural appearance. He has no difficulty in passing his water, and it presents a normal appearance. The only difficulty, then, of which he complains, is this pain, which has existed for some time, and which seems to interfere a good deal with his comfort.

The contour of the abdomen, you will notice, is normal, and physical examination is negative. The only point which I do not feel sure about in his history is, whether he has or not really been jaundiced. It is very difficult, sometimes, to be sure on that point, for slight degrees of jaundice very often escape observation.

The question, then is, what is the cause of the pain which he has had? Pain of this kind, and occurring in this way, and without any more symptoms than this man has given, is usually to be referred to the biliary passages; we usually suppose that it is due to the passage of biliary calculi, it is not always easy to understand what is the relation between the passage of the biliary calculi and the pain. If each attack of pain were due to the passage of a calculus through the whole length of the bile duct into the duodenum, we should expect that it would be attended by obstructive jaundice, but in many of these cases we find that this is not so; that either there is no jaundice at all, or that the jaundice is very slight, and occurs only in some attacks and not in others. We have, therefore, to suppose either that the calculi are small or that they pass through the duct without any great difficulty into the duodenum, although they do produce pain. Another supposition which we can make is, that there are a number of calculi in the gall bladder, and that from time to time one of these calculi engages in the cystic duct, does not pass through into the common duct, but falls back again into the gall bladder. This of course would be capable of producing pain without producing jaundice. It is quite common in these cases for the pain to be relieved by vomiting, as in this man's case. Many patients suffer much more severe pain than this man seems to suffer, or at any rate they make more fuss about it; and you can frequently relieve them of a given attack of pain by giving them some simple emetic which shall at once produce vomiting. It seems probable that the muscular effort which is made in vomiting causes the calculus to fall back from its lodgment in the duct into the gall bladder, and thus pain is relieved. We have to admit however, that our knowledge on this point is quite uncertain. It is very seldom that we have an opportunity to make an autopsy on persons troubled with this affection, for the rule is that they recover, and that they recover altogether after a longer or shorter time. Occasionally, however, a person suffering in this way dies from some other disease, and an autopsy is made. I have seen but two, and in both of these there was no change in the gall ducts, but there were a number of calculi of different sizes in the gall bladder. This would would make it probable that the pain in these cases is caused by a calculus becoming engaged in the duct, and on falling back into the bladder relief is experienced.

In the treatment of these cases, two objects must be kept in view: in the first place, to stop the attacks of pain when they occur; to render their duration as short as possible; and, in the second place, to try to get rid of the attacks altogether. The induction of vomiting has always appeared to me to be the promptest and easiest way to get rid of a given attack of pain, especially if the patient, as is often the case, vomit easily, without great effort. The simpler the emetic that will produce the effect, the better. In some cases simply a tumblerful of hot water will do; in other cases vomiting can be excited simply by passing the finger down the pharynx; in others you can use mustard and warm water, and so on.

Then, with a view to getting rid of the attacks of pain, I do not know that we can do any better than to put the patients upon the persistent use of soda, or some alkali, which they should take in considerable quantities, and for a considerable length of time.—*Nashville Jour. of Med., Oct., '81.*

CASES IN HOSPITAL PRACTICE.

A CLINIC BY AUSTIN FLINT, M.D.

Emphysema.

This patient's name is Thomas S., he is sixty-three years of age; pursues the business of peddling; was admitted on the eighth of this month. Please note this fact, gentlemen, that he has had more

or less cough since his childhood. About eighteen months ago he became much worse. Suffering for want of breath, and this difficulty has been increasing steadily, he is now unable to take any kind of active exercise without suffering from marked dyspnœa. The cough has been violent and paroxysmal. The paroxysms of coughing are accompanied with congestion of the face, and frothy sputa. The appetite is poor, and he has lost a good deal in weight. He complains, then, of cough, dyspnœa, loss of appetite, and impairment of strength.

Well, here, gentlemen, are good data for forming a presumptive opinion, but, if I ever lead you to do that, it is simply for a kind of discipline, for it is not a good plan to pursue in the examination of patients. We should try to avoid forming any definite opinion in diagnosis until we get all the facts. But here the history is quite a characteristic one, and the diagnosis will not be difficult.

This is a case I have been looking for for some time. It is the first we have had this session. I call your attention to the appearance of the chest. Writers are accustomed to speak of the barrel-shaped chest. It is not a bad simile. You see at once what you have here, a projection of the anterior wall of the chest, which is not natural. We do not find it unless we meet with a case where pulmonary emphysema began early in life and continued.

I call your attention next to the manner of breathing. In the first place, you see that, while lying perfectly quiet, as he is now, there is labor in breathing. He does not breathe easily, comfortably. Then observe that the upper part of the chest remains quiet while he breathes, that what movement does take place takes place at the lower part of the chest and at the epigastrium. During inspiration the lower part of the chest is drawn inward, just the reverse of what should occur. You see, when he takes a deep inspiration, the chest wall is lifted up like the shell of a tortoise, as it were one solid bony case, and the epigastrium is drawn in. These are characteristic visible signs of emphysema, with sufficient dilatation of the lungs to cause this deformity of the chest. Should he have a fit of coughing before leaving the amphitheatre, you will see that it is spasmodic, as stated in the history; one cough succeeding another too rapidly for full inspiration, so that the patient gets out of breath and suffers very much from dyspnœa, the face and neck becoming congested and swollen, and the proiabia not unfrequently becoming cyanosed. With the spasmodic paroxysms of coughing there is usually expectoration, which contains perhaps some mucus, but a good deal of serosity. This serosity contains air bubbles in abundance, so that it looks like soapsuds.

I will not dwell long on the signs obtained by percussion and auscultation, as we have considered them before. They can be obtained in cases where there is not as much deformity of the chest as exists here. You observe that his chest is dilated beyond the utmost limits of forced inspiration in health. That is an important fact as bearing on the mechanism of emphysema. It shows conclusively that in the production of emphysema, such as we have here, something more is required than the collapse of certain pulmonary lobules and the expansion of others to fill the space.

Pulmonary resonance is increased, vesiculo-tympanitic and higher in pitch, especially as we ascend. The tympanitic quality and pitch is a little more marked on the right, showing that here is an illustration of the rule that the upper lobe of the left lung becomes emphysematous to a greater degree than that of the right. A reason for this may be that in violent fits of coughing and strains upon the lungs from his labor, the left upper lobe is more compressed than the right in violent inspiratory acts, because the liver prevents so great force being exerted upon the right lobe by the inward movement at the lower part of the chest and at the epigastrium. There is feeble respiratory murmur on both sides, marked on the left side, because there is more emphysema. There is short inspiration and prolonged expiration, but this prolonged expiratory sound has the same quality and pitch as the expiratory sound of health. Please bear in mind, viz., that although there is prolonged expiration it does not differ in pitch and quality from that in health, and do not examine for bronchial or broncho-vesicular expiration, for where these exist there is a rise in pitch, and a tubular quality.

The heart is pushed below its normal position, on account of the increased volume of the lung at the left upper lobe.

Now, this patient has no œdema. When œdema occurs it is dependent upon the effect of the emphysema on the right side of the heart. Emphysema involves an obstacle in the pulmonary circulation; that obstacle leads to an over-filling of the right side of the heart; that leads to increased power of the right verticle; that leads to hypertrophic enlargement of the right side; and that leads ultimately to dilatation. Then we have an obstacle affecting the systemic circulation, and the result of that is general dropsy, together with more or less cyanosis. Now, you see this patient's lips are of pretty good color, just a little dark, and he has no œdema. The history does not show that he has had asthma. It is a case of chronic bronchitis occurring early in life, persisting, and leading to emphysema which, in the great number of years that have expired, has reached the degree which you see here. If there were enough chronic bronchitis to lead to phthisis, in a case like

this, it is difficult to answer why we do not have it, and yet we know that this condition antagonizes the occurrence of phthisis.

What is to be done in a case like this? What is the objective point of treatment? It is to diminish, if we can, the bronchitis; to improve his condition as respects that, as far as we can. This distention of the chest will never disappear; but if we can relieve the bronchitis, it will not be likely to increase, and it may diminish somewhat, perhaps, even considerably. We should, therefore, aside from certain palliative measures, employ remedies which are found by experience to exert a sanitary effect upon chronic bronchitis, as the iodide of potassium, the chloride of ammonium, the chloride of potassium, the balsamic remedies. It is possible a good deal of good may be effected by their use in this case.

Typhoid Fever.

Case 2.—The next case, gentlemen, is one of a good deal of interest. I hardly know how to manage it, because the record is so long. You will see why it is so, and why it is very desirable it should be so. The temperature has been taken hourly for several days, and it makes a great many details. But I will try to get the meat out of the nut. It is a case of typhoid fever which has been treated pretty vigorously with the wet sheet, and then with quinine.

The patient is a girl about fifteen years of age, and is now getting along very satisfactorily. She still presents some, but not so much as she did, of that dull, indifferent expression, which is strikingly marked in most cases of this fever.

Now, let us see what we can get out of the history, so far as regards the practical points. Bridget C., fifteen years of age, admitted on the fifth instant. A week before her admission she was taken ill. The first thing of which she complained was headache, and that was followed by a feeling of lassitude, loss of appetite, and vague pains.

On her admission, which was a week afterward, she complained of having pains all over, a general feeling of malaise, headache, weariness, loss of appetite, etc. She had no epistaxis or diarrhœa—an absence of two symptoms which are very frequently present, and which, therefore, possess diagnostic significance. But we have no difficulty in reaching the diagnosis in the absence of these. The face was flushed, the eyes suffused, the tongue coated white, red lips, sordes on the teeth, some pharyngitis. The patient's mother was admitted on the same day, in about the same condition.

On physical examination, there was right iliac tenderness and gurgling, but no tympanitis. Three rose colored lenticular spots were found on the abdomen. Subsequently some more were found. The spleen was slightly enlarged.

Now we come to the temperature and treatment. On the fifth, which was the day of her admission, the temperature at 11 o'clock was 101.5°. She was ordered whisky, half an ounce every three hours, and a diet of milk and eggs. At 4 o'clock the temperature was 404.5°; at 4.45, 104.5°. Now she was placed in a wet sheet. By the wet sheet we mean enveloping the whole body in a sheet saturated with water at about a temperature of 80° F., first placing under the patient an India-rubber cloth, so as to protect the bed. Then the wet sheet, in which the patient is wrapped up, sprinkled about every fifteen minutes with water, of about the same temperature. Now, that is applied as a substitute for the cold bath, and I believe it to be such. You see at once it is more easily managed, and is much more convenient and comfortable for the patient. Taking him out of bed and putting him into a bath in the condition in which he is, is very apt to excite a good deal of mental and nervous disturbance. Moreover, it is attended with a good deal of trouble. In this way, however, the wet sheet can be continued as long as desirable without any trouble.

At 4.45 the temperature was 104.5°, and the patient was put in the wet sheet. At 5 the temperature was 104°; at 6, 104.25°; at 7, 103 75°; at 8, 104.75°; at 9, 101.75°; and then the sheet was removed. She was in it from 4.45 to 9, the temperature having been reduced from 104.5° to 101.75°. At 11 p.m. the temperature had risen to 105.5° in the axilla. The difference between the temperature of the mouth and the axilla is from a half to a whole degree. She was again placed in the wet sheet. At 12, midnight, the temperature was 104.5; at 1 a.m., 104.75; at 5, 104°; at 6, 104.75°; and so on until two o'clock, the wet sheet being continued steadily until that time of the afternoon of the next day, when the temperature had fallen to 103.5°. This mode of employing water can be continued much longer than the bath. At 3 o'clock the temperature again rose to 105.25°. It was then thought best to give her a full dose of quinine as an antipyretic. She was given twenty grains at 3. At 4 p.m. the temperature was 105.75°, and she was again placed in the wet sheet. The sheet was removed at midnight, the temperature having fallen only to 104°. So both measures, the quinine and the wet sheet, failed to reduce her temperature much. She was delirous, and this, you know, belongs to the disease. From 1 o'clock a.m. to 8, on the 7th, the temperature varied from 104° to 106°. The tongue was uniformly red and very dry, and she fretted a good deal about being placed in the wet sheet. She took nourishment well, and her general condition seemed to be good. During this entire day the wet sheet was not used, but at 1

p.m. she got ten grains of quinia. She had this day a loose yellow colored stool, such as belongs to the disease. The temperature kept up all day; at 6 p.m. it was 104.25°. The pulse was only 84, illustrating what we see often enough, that although not infrequently the temperature and pulse correspond, often there is a marked discrepancy. Here was a pulse of only 84 while the temperature was varying from 104.5° to 106°. Nothing was done except to give the dose of quinia, having been a little discouraged in not getting the effect hoped for from the wet sheet. One reason why it was not applied was, that the patient shrunk from it; was uncomfortable; fretted; cried. As a substitute for it, it was ordered at 6 o'clock in the evening that the body be sponged. Now, we can effect a good deal by sponging the body, if it only be continued and thoroughly carried out, either having the whole body exposed and sponged, or sponging a portion of the body at a time, doing so not for a few minutes only, but for many hours, perhaps. Well, this was commenced at six o'clock, sponging first one extremity, then the other, then the body, and so on, with tepid water. Twenty grains of quinia were ordered to be given every six hours, the first being given at 6 o'clock, the temperature then being 104°. At 9, it was 103.5°; at 10, 103.25; and so it went until 2 a.m., of the 8th, when it rose to 104°, and continued so until 7 p.m. when it fell to 103.75°; but at 12 m. she had received twenty grains of quinia, and the same amount at 6 p.m. At 8 p.m. the temperature was 103°; at 9, 104°; at 10, 101.75°. The patient was annoyed by the sponging. She had a slight cough, but no expectoration; the pulse was 96, and rather feeble; the carbonate of amonia was now given, five grains every three hours. The sponging was continued pretty constantly for a couple of days now, although the temperature did not go up very high. On the 9th it went up as high as 104°, but only once, and continued so only an hour. The rest of the time it varied from 100° to 103°, being kept down, as we have reason to think, by the sponging. Now we come to the 11th. This day, at 1 a.m., the temperature was 100°; at 9 a.m., 100.75° in the axilla; at 10, 100°; at 11, 100°. Now, you see, she has almost a normal temperature. There is no diarrhœa, there is no tympanitis, the mental condition is improved, and she is apparently approaching convalescence.

She had epistaxis after coming into the hospital. Interesting points in the case are, the occurrence of the fever without epistaxis or diarrhœa during the forming stage, and with no marked diarrhœa during the progress of the disease; still, some of the stools have been liquid, and of the characteristic yellow color; then a higher temperature and not a proportionate increase in frequency of the pulse. Had we formed an idea of the height of the fever in this case by the pulse we should have made a mistake. We will see yet whether she goes on to perfect convalescence and recovery.

(Later. The patient completely recovered.)

Bright's Disease.

Case 3.—Our next patient's name is M., 19 years of age, a seamstress, admitted the 27th ult. She began to cough about five months ago. Two months subsequently, while walking along the street, she slipped and fell, striking on her left side, and immediately began to raise blood. The quantity was small. For two weeks after the fall her sputa was stained with blood. She did not experience any embarrassment of respiration after the fall, but had pain and soreness in the right side. Since the cough began she has had occasional night sweats. She has lost in weight, her appetite is impaired. She entered the hospital complaining of cough, diminished appetite and strength, and night sweats. The physical examination showed prolonged high-pitched expiration, the voice sounds more distinctly transmitted at the left apex, and, on physical examination yesterday, I found vocal resonance distinctly increased at the left summit, and râles present there occasionally, so that it appears to be clear enough that this patient has a small phthisical affection situated at the upper part of the left lobe.

But I have brought the patient before you for another reason. She was given cod liver oil and hydrocyanic acid. On the 30th ult. it was noted that she had night sweats, and that the hands and feet showed some œdema—not much. On the 3rd inst. the patient was seized with a chill, followed by pain in the left side near the nipple. She had cough and orthopnœa; was suddenly seized with such difficulty of breathing that she was obliged to sit up in bed. The next day she had orthopnœa and pain in the side, and a cough, with a pinkish watery expectoration. The temperature was 101°, the pulse 120, the respirations 24. Examination showed œdema of the hands and lower extremities, and over both lungs posteriorly diminished fremitus, dulness on percussion, diminished vocal murmur, subcrepitant râles—a group of signs which clearly evinced pulmonary œdema.

What pathological connection should we suspect under those circumstances? There was no disease of the heart. We should, therefore, at once direct our attention to the kidneys, and, on examining the urine, it was found to be pale, clear, acid, of a specific gravity of 1.017, to contain traces of albumen, and small hyaline, fatty, and granular casts.

You can see, gentlemen, no appreciable œdema under her eyes to-day, and there is none of the feet, and the œdema of the lung has completely passed away. Indeed, that more or less of it,

passed away the day after its appearance. You observe, she presents no particularly morbid aspect. The point is this, gentlemen: this patient has disease of the kidneys (she has phthisis too), and yet, although œdema of the lungs and a little of the limbs and face was noticed, there was nothing to suggest the idea that she was suffering from renal disease.

Now, let us see what further facts can be obtained with regard to the urine. On the 4th inst. the amount of urine passed in the twenty-four hours was seventy-eight ounces; on the 5th, seventy-nine; on the 6th, forty; on the 7th, thirty-eight; on the 8th, thirty-six; on the 9th, thirty-six; on the 10th, twelve ounces. Some perhaps was lost. The temperature has been normal several days. She complains of pain in the left side. She was placed upon a diuretic.

From this history what form of chronic disease of the kidney has she? I do not suppose any of you will hesitate much in answering that question. "The cirrhotic or contracted kidney." Yes, of the different forms of chronic disease of the kidneys, so far as we can judge from the symptoms, she has the contracted kidney. This is shown by the absence of œdema, except in a small degree, a very small quantity of albumen, the presence of casts, urine of rather low specific gravity and large in quantity, and the occurrence of pulmonary œdema.

The practical lesson that I would impress by this case is, examination of the urine whenever we investigate it with reference to renal disease. Suppose we had examined the urine in this case only with reference to albumen, we would have said, here is only a small trace of albumen, which perhaps is due to some transient cause. This shows the importance of a microscopical examination. And here we have pulmonary œdema, whether it depend upon uræmia or not, we are not prepared to say; but in a case like this it is important to form an idea as to the amount of urea being eliminated, and it should be examined with reference to that fact. I see patients in consultation, and often, on asking if the urine has been examined, I am told it has been, that it contains albumen, but that is about all they know about it; sometimes they don't even examine for the specific gravity. The specific gravity and the quantity are the poinrs. These give us the data by which we can judge whether the urea is eliminated in sufficient quanty to relieve the patient from the danger of uræmia. I have not time to dwell upon this subject longer to-day, but you will recall the minor manifestation of uræmia as well as the graver. In this case the indications are to eliminate the urine in larger quantity than it is being passed at present, and to guard against another attack of pulmonary œdema, and further manifestations of renal disease.

Pneumonia.

Case 4.—This patient's name is Alexandra M., forty-five years of age, a domestic, a native of Canada, admitted on the 8th ult., having been ill two weeks. Her illness began with pain in the left side, with cough, no chill. On admission, she complained of cough, of dyspnœa, of pain in the left side, and of debility. The temperature was 101 in the morning, and 100 in the evening. On physical examination, there was found increased vocal fremitus, dullness, bronchial breathing, bronchophony, sub-crepitant and crepitant rales over the lower lobe of the left lung Well, of course, we could say it was a case of pneumonia. The general condition of the patient was very good, and we did not have a chill in the previous history, but still we have the signs of consolidation affecting the lower lobe, and some of the members of the clinical class will recollect that this is the patient who gave us a good illustration of bronchial respiration and bronchophony, bronchophonic whisper. Well, her general condition was good, and it remained good, and she felt well enough to sit up. She was allowed to sit up, but still there were those signs. She came in on the 8th ult. There being very little increase of temperature, and the signs mentioned continued two or three weeks, and I illustrated to different sections of the clinical class those physical signs by this patient. Well, we began to say then, this cannot be pneumonia; it must be fibroid phthisis. And we rather settled down on that conclusion. Last Friday, a week ago to-day, I took a section around to illustrate those physical signs in this patient, and to my surprise they had disappeared. She had not been examined for several days, and the signs of consolidation had in the meantime disappeared.

Now, what is the lesson? It is this. That in some cases of pneumonia (for no doubt it was a case of pneumonia) the consolidation of the lung continues, and leads us to think there is phthisis, but finally resolution takes place. So you will meet with cases where you will think there is pneumonia, and you will find several weeks elapse before resolution takes place. But resolution will at length take place. I shall never forget a patient who came into the hospital some years ago with consolidation at the upper lobe of one lung, and who was supposed to have phthisis. He remained in the hospital for some time, lying in his bed, attracting little attention, as he was supposed to have phthisis, until one day I was struck with the fact that he was looking better—very much better than one could expect of a patient with phthisis confined to bed, and on examining him, I found that consolidation had greatly diminished, that resolution was taking place, and that the patient had not phthisis, but pneumonia. He re-

covered, and shortly after enlisted and went into the army.

Hepatic Colic.

CASE 5.—As we are lecturing on hepatic colic in the didactic course I will present you a patient with that affection, but we have not time to make extended remarks upon it. His name is Daniel, colored, a waiter, and he was admitted on the 8th inst. No previous history was obtained except that he had three attacks similar to the one from which he is now suffering. The conjunctivæ show a moderate amount of jaundice. In the three attacks previous to this the prominent symptoms were pain in the right hypochondrium, radiating to the chest and right shoulder, tenderness of the liver, vomiting, and icterus or jaundice. Those are the salient points of the past attacks, and also of the one which he has had since he came into the hospital. The pain was paroxysmal, the paroxysms lasting an hour or more, as a rule, and occurring several times in the course of a week. The present attack began on the 8th inst., and was characterized hy pain over the liver, which radiated into the thorax and into the right shoulder, tenderness in the right hypochondrium, icterus, constipation, anorexia, emesis, and some febrile movement. Several paroxysms have occurred since his admission into the hospital, and during the intervals the right hypochondrium has been the seat of continuous dull pain and tenderness.—*Med. and Surg. Reporter.*

INTRA-CAPSULAR FRACTURES.

Dr. Maxwell (Illinois State Md. Society) gives the following on the above subject, together with the history of two cases in which his method of treatment was successful :—

The treatment of intra-capsular fractures has enjoyed the attention of the best minds in this country. In this paper I intend to summarize the teachings of modern surgery and suggest some additions to the treatment. Intra-capsular fractures are those involving the neck of the femur, entirely inside of the capsule of the joint. They are peculiar to advanced age and to females. They are remarkable on account of the small amount of force necessary to produce them, and for the extreme difficulty in obtaining union by bone. As age advances, remarkable changes take place in the shape and size of the neck of the femur. It joins the shaft more nearly at a right angle, diminishes in size and becomes more fragile. The possibility of bony union in these fractures has been discussed with no little warmth. Astley Cooper's and Frank Hamilton's researches show that, though possible in some instances, it is so rare as not to invalidate the truth of the assertion that there generally is non-union. Union does not take place for the reasons :

1. There is a deficient vascularity in the bones, due to their relative positions and deficiency of the artery passing through the ligamentum teres.

2. Whatever reparative material is developed has no local permanence, there being no support or nidus for it.

3. This material becomes so diluted with increased secretion of synovial fluid, as to be incapable of making any progress.

4. Imperfect coaptation and the impossibility of keeping the parts quiet.

These causes combined with the action of the powerful muscles at the site of fracture, constitute the chief reasons for non-union.

The treatment has been the subject of difference of opinion. Erichsen advocates a similar plan to Agnew's. The failure on the part of surgery to have means to coaptate the ends of the fractured bones is enough to account for the failure of many fractures to unite. If surgery proposed no better methods of treating fractures of long bones than those for intra-capsular fractures, there would be, no doubt, as much non-union in these, and it would be said that the bones are degenerated, etc. Is there not too great a tendency to saying such things instead of trying to put the bones in good coaptation? Extension must always be used in the direction opposite to the displacing force.

All the forces act on the lower fragment, and the tendencies to displacement are upward and inward. The muscles are strong and numerous and tend to draw the femur upward, shortening the limb and turning the thigh outward, and throw the trochanter behind the acetabulum. There is eversion of the foot, and crepitation can be distinguished when extension is made. The teachings of modern surgery, that extensions be used, is not sufficient.

The following plan, which I offer, is rational and has been successful in two cases in my practice.

Apply extension in two directions in opposition to two forces, longitudinally and laterally. Put adhesive strips along the leg and foot, to hold a cord passing over pulley and attached to weight. Lateral extension is made by a five inch muslin band around the body. A splint is applied to the inner aspect of the thigh. A pulley is placed opposite the crest of the ilium and four inches above it. Counter extension is made by the body ; the bed is elevated at the foot, one foot on the fractured side and eight inches on the other. The head post on the injured side is elevated four and a quarter inches. By this method the fragments are brought as nearly correctly into apposition as is possible. The inner surface of the capsular ligament is rendered tense and applies itself to the sides of the neck and holds it.

SURGICAL TREATMENT OF EMPYEMA.

The subject was introduced by Dr. C. Gerhardt, (Würzburg), who first reviewed the opinions of the earlier writers on the subject. Passing to the practical side of the question he expressed the belief that a small empyema might be cured spontaneously by absorption; another favourable termination was by expectoration, after a spontaneous opening into the lung; after two or three weeks of purulent expectoration, such cases got well. As to operative interference, he found that a single aspiration sometimes resulted in a complete cure; a method which had been found useful consisted in replacing the pus withdrawn by some indifferent or antiseptic fluid, without the admission of air to the chest. He advocated the free opening of the chest under antiseptic precautions; and thought that to wash out the pleura was not free from danger. Very early childhood gave less favourable, the middle period of childhood more favourable, results than adult age.

Dr. Ranke (Munich) thought that in children an empyema comparatively seldom opened into the bronchi; this, he thought was the most favourable termination. He made use of incision, with antiseptic precautions, and under this system found that his patients generally remained about six months in hospital.

Dr. Jacobi, (New York), had seen three cases of empyema in infants, one containing as much as twelve or thirteen ounces, in which recovery had occurred after a single aspiration.

Mr. F. Richardson Cross (Bristol), thought that the early removal of pleuritic effusion was necessary to insure the re-expansion of the lung. He advised an incision in the eighth or ninth intercostal space, with antiseptic precautions, if aspiration failed after two trials. He had recently had three very successful cases treated on this method. One of them was a most unfavourable case, in a girl aged eight, but recovery ensued in seven weeks.

Mr. R. W. Parker (London), said that as the question of treatment must very much depend on the mechanical condition of the chest, it would be well to divide empyemata into two chief classes, viz: 1. As found in children; 2. As found in adults. Whatever method of treatment was adopted, no favourable result could be expected unless the conditions regulating chest-movement assisted. The cavity of the empyema could not be emptied unless the lung could re-expand, or the chest-wall fall in. In children these conditions were present more commonly than in adults; hence the disease in them was less serious. In old people, whose chest-walls were very rigid, empyema was always a serious, often an incurable, disease. He believed that aspiration, two or three times repeated if need be, was the best treatment in childhood, and ought always to be adopted before other measures were tried. No doubt the next best mode of cure was the expectoration of pus through the lung; but it was hardly safe to postpone treatment until this took place spontaneously, and, unfortunately, there were no mechanical means by which it might be brought on. When aspirations had failed, a free incision into the lowest and most dependent part of the chest, with antiseptic precautions, was called for. In adults he also advocated aspiration; but if the cavity were large he also suggested that filtered and carbolized air should be injected into the pleura; this air helped to replace the fluid, lessened the dragging sensation often felt, and prevented reaccumulation.—*Brit. Med. Journal.*

Differential Diagnosis of Abdominal Tumors.—Dr. Erich of Baltimore, contributes a very instructive paper to the Clinical Society of Maryland, wherein he points out how easy we may make very singular errors of diagnosis in abdominal tumors. He illustrates his views by the narration of several cases, hoping, apparently, to add to the "known sources of error" in arriving at a good diagnosis. In case 1, a first examination per vaginam "revealed an irregular, hard, nodular tumor in the left iliac region somewhat posteriorly," and a diagnosis of probable cancer was ventured. A year and a half after this examination the patient was examined jointly by Dr. Erich and Dr. Chadwick, of Boston, when the conditions noted, had entirely changed. The tumor then noted, had disappeared, "and a firm, round, movable tumor, about the size of an adult head, was found occupying the hypogastric region." Present diagnosis—a fibroid. It was decided to remove the supposed fibroid by laparotomy. Upon making an incision and bringing the tumor in view, an exploratory puncture was made which yielded pure pus. The patient died, and a *post mortem* revealed an abscess. This case teaches that fluctuation cannot always be made out, even when a large amount of fluid is present. "I was compelled to acknowledge an error of omission," says Dr. E., "in not making an exploratory puncture before resorting to laparotomy. I have since then determined never to pronounce an abdominal tumor solid until after aspiration."

Case 2 had been pronounced by an eminent surgeon a solid uterine fibroid. All the conditions so indicated; but true to his determination, an aspirator needle was introduced by Dr. Erich, and to the surprise of himself, as well as others, "a pint of pure pus was withdrawn."

In Case 3 the patient had been sent to Dr. E. by a friend who had made out a "probable diagnosis of ovarian tumor." The examination made by Dr. Erich appeared to exclude pelvic cellulitis

and abscess—the diagnosis of ovarian cyst was therefore provisionally endorsed, and preparations for an operation were made. Preparatory to this, a tonic treatment was set up, and a mercurial purge administered. The purgative produced diarrhœa with profuse and offensive discharges. Fever was established. The tumor was speedily reduced one-half. Aspiration now instituted, removed a quantity of offensive pus and gas. The tumor was evidently a pelvic abscess.

In his concluding observations Dr. Erich remarks: "In view of these difficulties, which have been acknowledged by the best men in the profession as liable to occur to them, I think it advisable to use the aspirator in cases of doubtful abdominal tumor before pronoucing definitely upon its nature.—*Obstetric Gazette.*

Rectal Exploration and Diagnosis. — Dr. Charles B. Kelsey, of New York, contributes an article to the *New York Medical Journal and Obstetrical Review* for October, 1881, which contains several valuable suggestions and the description of some methods which are original. After referring to the many errors which arise in this department of surgery from the lack of care and proper examination, he goes on to answer the question of how to make a rectal examination which shall be at the same time thorough and as free from pain as possible. In his own practice he uses an artificial light of his own arrangement and a forehead mirror, which enable him at all times to illuminate the rectum thoroughly, while by the side of the examining table stands an instrument-case fitted with all necessary appliances. In addition to these things he insists strongly on the necessity of having a water-closet communicating with the office, so that injections may be administered and the bowels moved at the time of the examination. In the matter of specula he confines himself almost exclusively to Sims's, finding this the best of all after the sphincter has been stretched, and not finding any that give a fair view of the parts until this has been done. He relies, however, much more upon the finger for a diagnosis than upon any artificial helps, and claims that with it, after the necessary skill has been acquired, the slightest pathological changes may be detected. In the matter of bougies he also has his own preference, and recommends a soft-rubber instrument, similar to that of Wales, only more flexible. For detecting strictures high up in the rectum or in the sigmoid flexure little confidence is to be placed in a bougie of any sort, and the writer relies almost entirely upon manual examination either through the abdominal wall or by passing the hand into the rectal pouch. The latter method he holds to be free from danger and certain in its conclusions.

Drainage of the Pericardium. — A case, probably unique in the annals of paracentesis, has been recorded by Rosenstein, of Leyden. A child, aged ten years, suffering from pericardial effusion, presented such a degree of interference with circulation and respiration, that an aspirator needle was passed into the fourth intercostal space, near the sternum, and 620 cubic centimetres of liquid were withdrawn. Left.-sided pleural effusion soon followed, and 1100 cubic centimetres of liquid were evacuated. The cardiac symptoms increased, and necessitated a second puncture of the pericardium; 120 cubic centimetres of purulent liquid were withdrawn. A relapse occurring, a larger opening was made (an inch and a half long; in the fourth intercostal space. The soft parts were divided layer by layer under strict antiseptic precautions. When the pericardial cavity was reached a large quantity of pus escaped. Two drainage tubes were inserted. The operation was followed by an immediate return of the circulation and respiration to normal conditions. An incision into the pleura, however, also became necessary. At the end of four months of treatment the patient left the hospital in good condition. There was no pyrexia or œdema of the skin in the præcordial region to indicate the purulent nature of the effusion.—*The Lancet.*

Sulphur for Pimples on the Face. — Dr. Gage Parsons believes that Mr. Erasmus Wilson was the first to propose sulphur lotion in acne punctata, according to the *Practitioner.* The usual lotion of the flowers of sulphur with glycerine water is a valuable remedy, but from the readiness with which the sulphur separates it is inelegant and inconvenient, while it is not quite satisfactory in its results. A far more efficacious mode of using sulphur is to dust the face with pure precipitated sulphur every night with an ordinary puff used for toilet purposes. Recently two severe cases of acne of two years' standing, which had resisted the ordinary methods of treatment, yielded at once to sulphur thus applied. If the sulphur be scented with oil of lemon or roses it will form an elegant cosmetic.

The Use of Hot Water in Diseases of the Eye.—Dr. Leartus Connor, *Am. Jour. Medical Sciences*, speaks very highly of the frequent local application of hot water to the eye in cases of acute conjunctivitis and blepharitis, and also in chronic hyperemia, granular inflammations, iritis, and corneal affections, in which he has used it with great success. The water should be as hot as the patient can comfortably bear with his hand. The patient leans over the basin and applies the water to the eye for a few minutes, from three to twelve times a day, according to the urgency of the case.

THE CANADA LANCET.

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MEDICAL COLLEGE BANQUETS.

During the past month and within one week of each other, the two Medical Schools in this city held their usual annual dinners. The attendance in both instances was very large, numbering about 150 at each, and the events were, as the students would say, a "grand success." Many of the guests came a long distance to do honor to their respective schools, and to be present at such interesting entertainments. The Trinity Medical College dinner was held at the Rossin House, and the Toronto School of Medicine in the Queen's Hotel. Both were "officially" conducted on strictly temperance principles, that is to say, no intoxicating liquors were used at the table, and the toasts were drunk in cold water. The speeches at both entertainments were much above the average after dinner business. The Trinity Medical dinner was presided over with much ability by the following gentlemen: Mr. Nattress, chairman; Mr. Sawers, 1st. Vice; Mr. Johnston, of Jamaica, 2nd. Vice; while that of the Toronto School was presided over by Mr. Knill, Mr. Coulter, and Mr. J. S. Draper, respectively, all of whom discharged their duties in a most agreeable and satisfactory manner. One most pleasing feature of these entertainments was the cordial greetings and the display of most kindly feeling between the faculties and students of the two schools. Representatives and delegates from each school were present at the respective dinners. We are glad to be able to bear testimony to the increased and increasing good feeling, harmony and sympathy which exists between these so-called rival schools, for their should be no rivalry but honest and honorable competition. The toasts at both entertainments were nearly alike, viz.: the usual standing toasts to which were added the "Mayor and Corporation," "Universities, Colleges, and Sister Institutions," "The Faculty, Students, &c., of the respective schools," "The College of Physicians and Surgeons of Ontario," The "Toronto General Hospital," The "Press."

At the Trinity College dinner an additional toast was given following that of the "Queen and Royal Family," viz.: "The President of the United States," which was responded to in an able and eloquent speech by Rev. H. M. Parsons, pastor of Knox Church, Toronto. He spoke in feeling terms of the sterling character of the late President Garfield and the national unification which resulted from what at first seemed a national calamity.

In responding to the "Dominion Parliament," Hon. Mr. Mackenzie opened with a few happy hits, and then pithily referred to the useful part the Dominion Parliament fills in our Constitution, the freest in America. In noticing the remarks of the gallant Colonels who had preceded him in speaking, he said that Kingston Military School was capable of giving as efficient a military training as either West Point or any military college in Europe; and he questioned whether England herself could have given a readier response to the call to arms than did the Canadian volunteers at the time of the Fenian raid.

Hon. Mr. Mowat confined his remarks chiefly to the dignity of the physician's calling, the excellence of the medical institutions of the Province, and the legislation affecting the profession. Mayor McMurrich replied in fitting terms to the toast of the "Mayor and Corporation."

The toast of the Colleges and Sister Institutions was responded to by Hon. G. W. Allan, for Trinity University, Vice-Chancellor Mulock for Toronto University; Principal Buchan for Upper Canada College; Drs. Graham and A. H. Wright for the Toronto School of Medicine, and Mr. Clelland for the class of this school.

Vice-Chancellor Mulock said among other things that he had it upon the authority of a distinguished Professor in a London Hospital, who visited Toronto recently, that the Canadian students who attend the London Hospitals are in regard to the-

oretical attainments, quite equal to English-trained students, but are somewhat deficient in the practical knowledge of the healing art. This was owing, he thought, to the limited population of our country and cities not affording that profusion of clinical material which was at the command of older and larger Hospitals. In referring to the question of affiliation, he said that whenever Trinity school desired the co-operation of Toronto University in aid of any step calculated to advance the cause of medical science, an earnest response would be given to the call.

Dr. Allison, of Bowmanville, and Dr. Burns, of Toronto, ably responded to the toast of the "Ontario Medical Council." "Trinity Medical School, its graduates and under-graduates," was responded to by Drs. Geikie and Spencer, on behalf of the Faculty and graduates, and Messrs. Camfield, Duncombe, and Cochrane for the class. Dr. O'Reilly and Mr. John Gillespie, replied to the to the toast of the "Toronto General Hospital." Dr. G. O. O'Reilly, of Fergus, acted as the champion of "The Ladies," and "The Press," was replied to by Dr. Fulton, of the LANCET, and Dr. Wright, of the *Canadian Journal of Medical Science.*

At the Toronto School dinner, the chairman, Mr. Knill, said that much good would come from these social meetings by affording the students an opportunity to express their opinions, or state their grievances. One of the grievances now felt by the students was a difference which existed between the latter and the Medical Council. It was notorious that for the last four or five years the students had acquired an unenviable reputation, and it would be well to consider whether they alone are entitled to all the odium heaped upon them. Every spring the public were treated to long dissertations upon the culpability of medical students, and those unseemly contentions which had occurred between the Council and the students were not compatible with the dignity of the profession. He was not defending improper conduct, if such existed, however, and hoped the unseemly squabbles would not again occur. He then pointed out what should be the aim and duty of the student, as well as his ambition after leaving college—that he should always try to tread in the highest paths of his profession.

Dr. F. W. Strange, M. P., replied to the toast of the "Army and Navy." He pointed out the importance of the service, and the aid the medical fraternity could be to the military. The militia force, he said, was not aggressive, but only protective, but were ready for action in the moment of need. Mr. James Beaty M.P., responded for the "Dominion Legislature," and Mr. Badgerow, M.P.P., for the "Local." Mr. Beaty said, the medical body was not insignificant in any sense, even beyond their ordinary sphere. There were seven in the House of Commons, and one of these was the Speaker. If the rest of the House were disposed to ignore the rights of the profession, their force was strong enough to assert its own claims. He then dwelt on the merits of the Canadian Government, describing it as the freest on the earth and the best on the continent. It contained the best elements of the British Constitution, and none of the objectionable ones. The people didn't want annexation, he said, nor "independence" either; they did not want to support armies and navies of their own, for now, without feeling the burdens of connection with the Empire, we had the protection of British Imperial forces. Mayor McMurrich acknowledged the toast of the "Mayor and Corporation."

Honourable Edward Blake responded on behalf of the Toronto University. He said, there was no matter of greater importance connected with the cause of education than that the most liberal provision possible should be made for the higher education; for this was the great preparation to advancement in the range of avocations included under the liberal arts and sciences, as well as in the public positions many were called upon to fill. Thus the benefits of this education would be felt down through the pursuits of the people, redounding rewards back again upon the State which granted them. Some provision, he thought, for teaching the principles of jurisprudence in the higher institutions should be provided, and though he would not protest against the law "send for the doctor," something should be learnt outside the medical schools of the structure of the body and the laws of health.

Professor Rayner responded for Victoria College, and Rev. Principal Cavan for Knox College, both of whom were well received. Dr. Kennedy and Mr. Wallace responded for Trinity

Medical College, and students respectively. "Our Faculty" was responded to by Drs. Aikins, Barrett and Richardson. The Medical Council was ably represented by Dr. Burns. The Learned Professions was responded to by Rev. Dr. Wild and Dr. Tye, of Thamesville. The latter made a most excellent speech, but as the evening was now far advanced no report was made for the press. The "Toronto General Hospital," replied to by Dr. O'Reilly, and the "Ladies," by Mr. Patterson, brought the evening's entertainment to a close. At both dinners a number of songs were interspersed among the speeches, and an Italian string band discoursed appropriate music.

The annual dinner of the Royal College of Physicians and Surgeons of Kingston, was held on the 24th ult., and was a most successful gathering, a large number of the dignitaries of the limestone city being present.

SANITARY REFORM.

The subject of public health and sanitary reform is one which requires to be kept constantly before the profession and the public, until some efficient legislative measures are secured from the Government. It is a question of such vital interest to the welfare of the people and the prosperity of the nation, that it should take precedence of every other consideration. All merely political questions should be laid aside, in view of the great and inestimable importance of a question which has for its objects the life and health of the people. It is clearly one of the first duties of a Government to provide the means, wherever practicable, for the amelioration of the condition of the people, whether in the matter of sickness, distress by water or fire, or other public calamity. The members of the medical profession have been, we may say, so far, almost the only individuals who have interested themselves in the matter of public health. They have at no time, when a favorable opportunity presented itself, shown any indifference, inactivity, or want of appreciation in regard to measures having this object in view, but on the contrary have, from time to time, and in various ways, urged upon the Governments, Federal and Provincial, the importance of preventive measures. It is not a little singular, that in all countries physicians have been foremost in urging upon the people and the authorities, the necessity for general systematic means for the prevention of sickness and the preservation of life. It is indeed almost entirely owing to the indefatigable efforts of the profession, that means to this end have been carried out in any country. But from whatever cause, whether or not the members of the profession in this country have been less importunate in this behalf, than those in Great Britain, Europe, or the United States, we are very far behind these countries in the efforts employed for promoting public health. We do not believe it would be in the least degree inimical to the interest of the profession in this country, if there were established upon a proper basis, a well organized sanitary system for the Dominion; on the contrary, such a system would add materially to the value of professional services, and place the profession itself on a higher level in public estimation than it occupies at present. It would be infinitely better in more respects than one, for municipalities and governments to employ medical men to give a portion of their time to the prevention of disease, than for the public to employ them for the cure of diseases which have for the most part been caused by the neglect of the most simple laws of health. Besides, the lessening of preventable sickness, is a much more worthy and dignified employment than the curing of it. We trust that the profession will lose no opportunity of urging upon the various Governments of the day, the very great necessity of thoroughly organized Sanitary Boards,—a Federal Board or Department for the Dominion, and a Provincial Board in each of the Provinces. The expenses of these Boards need not be very large at first. For the Province of Ontario, the annual expenditure need not exceed the sum of $4,000 or $5,000. In New York State the annual appropriation for this purpose is $20,000. In Michigan, $6,000. In Vermont and New Hampshire, the amount is somewhat less, but quite sufficient for the purpose of initiating the work. With the view of bringing this matter again under the notice of the Ontario Government, we have been solicited to enclose blank petitions to all our subscribers, with a request that they will not only sign the petitions themselves, but obtain as many signatures as they conveniently can, of prominent public men and others who may sympathize with the movement. The petitions when filled up should be returned to

this office at the earliest possible moment, on account of the near approach of the session, the estimates being even now, in all probability, under the consideration of the Government. When the petitions are all returned, it is proposed to appoint a large and influential deputation to present them, and to wait upon the members of the Government and press upon them the necessity for immediate legislative action.

THE HALIFAX MEDICAL COLLEGE.

The opening of the fifteenth annual session of this College took place on the 27th of October. Dr. R. S. Black, the President, delivered the opening address. After extending a sincere and cordial welcome to the students present, he pointed out the aims of the College, which were to give a sound, solid education, and to supply to the Maritime Provinces medical men able at first to identify and then to treat properly the various diseases that may be brought to their notice. He also referred to the high standing of their alumni in the schools of London and Edinburgh. Not being a member of the Faculty he spoke with freedom regarding the laborious and painstaking corps of Professors in the College. The lecturer said the profession they had chosen was a noble one, its grand aim being the preservation of the health and the cure of disease. No other science includes within its scope so many and varied departments of knowledge, yet they could not hope to master all, but must content themselves with a clear view of the principles, and a limited acquaintance with the facts of such as were pertinent to their pursuits. Many branches of science were of great value as feeders of our medical reservoirs, and the physician's office was to draw the healing waters. He concluded an able and eloquent address by saying that they were not to feel dismayed by the contemplation of the work before them, but to take courage and set themselves hopefully to the work, and order and system would soon be evolved from what now to them, appeared confusion and chaos. The Dean of the College, Dr. A. P. Reid, then addressed the students. He spoke of the changes in the method of practice, and the great advances made in medical science. He also gave sound practical advice to those about entering the profession. It is expected that there will be a large attendance of students this session.

THE USE OF MALTINE.—Dr. J. Milner Fothergill (*London Practitioner*) says in regard to the use of Maltine, that in order to aid the defective action upon starch by the natural diastase being deficient in quantity or impaired in power, we add the artificial diastase "maltine." But, as Dr. Roberts points out, in order to make this ferment operative it must not be taken after a meal is over. Rather it should be added to the various forms of milk porridge or puddings before they are taken into the mouth. About this there exists no difficulty. Maltine is a molasses-like matter and mixes readily with the milk, gruel, &c., without interfering either with its attractiveness in appearance, or its toothsomeness; indeed its sweet taste renders the gruel, &c., more palatable. A minute or two before the milky mess is placed before the child, or invalid, the maltine should be added. If a certain portion of baked flour, no matter in what concrete form, were added to plain milk, and some maltine mixed with it, before it is placed on the nursery table, we should hear much less of infantile indigestion and mal-nutrition.

O TEMPORA! O MORES!—We regret to see so many of our confrères rushing into print with every little accident that comes in their way. An onlooker must come to one of two conclusions, viz.: either that the medical man has had such a limited number of cases in surgery, that he is overjoyed by the occurrence of one or two trifling cases, and in the simplicity of his soul must needs publish them, to let the public know that he has had something to do; or that he is endeavoring to attract public attention by playing the role of the advertising quack. We regret to see an old and much respected confrère, occupying half a column in the *Port Hope Times* of the 18th ult., with a report by the Dr. himself, so it is stated, of four or five simple accidents in surgery to which he was called. When those who have grown grey in the service of the profession adopt such means of bringing their names into public prominence, what is to be expected from the younger members of the profession, who have at least some excuse for endeavoring to attract public attention?

A LITTLE MORE ESPRIT DE CORPS.—The case of the Queen vs. Dr. Washington of Orangeville, which has been before the Courts since April last, has recently been decided in the Drs. favor. The case was one of alleged assault, in which the magistrate (Mayor Henry, M.D.,) fined both parties $5 and costs. Dr. Washington feeling that he had sufficient evidence to prove that he only acted in self-defence, appealed from Dr. Henry's decision, and the case was tried before the County Judge, but the Mayor's ruling was confirmed by this Court. It was then appealed to the Court of Queen's Bench, Toronto, before Judge Osler, and ended in the acquittal of Dr. Washington as above stated. It is much to be regretted that there is not a greater degree of *esprit de corps* among the members of the medical profession, for if the proper feelings had existed here, this action would never have gone beyond the Mayor's office.

PORRO'S OPERATION IN ENGLAND.—In October last Mr. Spencer Wells, as stated in the *British Medical Journal*, performed Porro's operation for the first time in England. The patient, aged 37, between five and six months advanced in pregnancy, was suffering from epithelioma of the cervix uteri. The operation is a supra-vaginal amputation of the uterus in addition to the Cæsarian section. The uterus was brought out through an incision in the abdomen, the broad ligaments transfixed by silk ligatures external to the ovaries, the bladder dissected from the uterus, and the vagina divided all around close to the uterine wall. The opening from the peritoneal cavity into the vagina was closed by silk sutures. Very little blood was lost, and on October 27th, seven days after the operation, the patient was doing well.

TESTIMONIAL TO VIRCHOW.—A movement was recently set on foot in London, England, to obtain subscriptions towards the testimonial to be presented to Prof. Virchow, by his brethren in Germany, on the occasion of the completion of the 25th year of his professorship in the University of Berlin, and of his 60th birthday. Many of the leading physicians and surgeons in London subscribed to the fund. The presentation took place in Berlin on the 19th ult. The learned professor has again been elected to the Reichstag.

REVOLVING BOOK-CASES.—We desire to call the attention of our numerous readers to Johnston's Revolving Book-cases, manufactured by Baker, Pratt & Co., 19 Bond Street, New York. They are wholly constructed of iron, with adjustable shelves, highly finished in black and gilt ornamentation, and are exceedingly useful and convenient, as well as ornamental. We have one in use in our office, and prize it most highly. With a simple touch of the hand while seated at the desk, one can bring before him any book required for consultation. Their low price brings them within the reach of all. They are of different sizes, but the larger, three or four shelved cases, are the best, and are capable of holding from 60 to 100 volumes. Send for circular to above-mentioned address.

"FETCHING THE DOCTOR."—This is one of the latest and most exquisite of Rogers' famous "groups of statuary." It represents a lad, with a youth in front of him, on horseback, in hot haste to fetch the doctor to some fortunate or unfortunate sufferer. The lads seem fully to realize the importance of their mission, and are losing no time by the way. They evidently enjoy the excitement and the ride, and are urging the poor animal to the utmost speed consistent with safety to themselves. It is finished in Rogers best style of art, and is suitable either for a parlor or library ornament, or for a doctor's office. It would make a most agreeable and appropriate Christmas-box. The price is only $10. Send for catalogue of groups, to 23 Union Square, New York.

ANTIVIVISECTION PROSECUTION.—We learn from the *British Med. Journal*, Nov. 12th, that the Antivivisection Society of London has entered a criminal prosecution against Prof. Ferrier in the Bow Street Police Court. It is not at all creditable to the boasted intelligence of the British nation, that an eminent physician and man of science, whose valuable labors and important researches in reference to the diagnosis and treatment of brain diseases are recognized the world over, should be assailed in such a manner. It surely cannot be regarded in any other light, than as an abuse of the recent legislative enactments in reference to experiments upon animals.

TRINITY COLLEGE CONVOCATION.—The annual convocation of the University of Trinity College, for conferring degrees, was held in Convocation Hall on the 10th ult. The installation of the new Provost, Rev. Mr. Body, also took place, and a very pleasant reception was given him by the friends of the University, in the evening, which was largely attended.

The following gentlemen received the degree of M.D., C.M. :—W. A. Allen, G. W. Baker, J. Baugh, G. S. Beck, L. Bentley, T. G. Brereton, W. B. Duck, H. K. Kerr, T. A. Kidd, N. McPhatter, W. F. Peters, A. E. Stutt, T. Sullivan, A. McC. Sloan, and E. A. Spilsbury.

REMOVAL OF THE KIDNEY.—Dr. Barwell, of Charing-Cross Hospital, has again performed the operation of nephrectomy. The operation was undertaken for the relief of stone in the kidney, which had caused the formation of a large lumbar abscess. The patient, aged 18, recovered. This operation has also quite recently been performed by Mr. Whitehead, F. R. C. S. E., of Manchester, but the patient died on the fifth day after the operation. The total number of operations on record is 56 ; of these there were 27 recoveries and 29 deaths. The lumbar incisions show better results than those in the linea alba.

HYDROLEINE.—This preparation of Cod-Liver Oil has been before the profession of Canada nearly two years, and is gradually growing in favour. We have used it in our practice with most excellent results, and feel it our duty to bring it again under the notice of our readers. The members of the profession in this city also, who have given it an extended trial, speak in terms of the highest praise in regard to its efficacy. It is as agreeable to the taste as Cod-liver Oil can be made, and is readily assimilated by most patients.

BRITISH QUALIFICATIONS.—James Ross, M.D., McGill College, has been admitted Licentiate of the Royal College of Physicians, London. Dr. J. L. Foley, (Bishop's College), also received the L.R. C.P., London, on the 22nd Oct.

The following gentlemen have passed the primary examination of the Royal College of Surgeons, England. Dr. J. H. Betts, Kingston, and Dr. W. A. D. Montgomery, Toronto.

APPOINTMENTS.—Dr. J. W. Rosebrugh, of Hamilton, has been appointed by the Senate of Victoria College, Cobourg, as the representative of that body in the Ontario Medical Council, in the room of Hon. Dr. Brouse, deceased.

Dr. F. E. Woolverton, has been appointed Medical Superintendent of the Hamilton General Hospital.

Dr. N. McPhatter, of Fergus, has received the appointment of a surgency on the Pacific Railway.

Dr. Alfred Bray, formerly of Thorold, has been appointed Prof. of Toxicology in the Minneapolis Hospital Medical College.

Dr. J. L. Foley has been appointed Assistant Demonstrator of Anatomy in Bishop's Medical College, Montreal.

W. H. McDonald, student of Trinity Medical College, has been appointed medical assistant, Toronto General Hospital. The other assistants are Drs. Stark, Charlton and Sweetnam.

PRACTICES FOR SALE—In our advertising pages will be found three country practices for sale, averaging annually $2,000, $4,000, and $6,000 each, respectively. The parties are personally known to us, and we have every reason to believe that the respective values of these practices are not over-estimated.

LITERARY SHEAVES.—Dr. P. Bender, of Quebec, has entered the list of authorship, in the production of a book entitled "Literary Sheaves," or "*La Litterature au Canada Francaise*," drama, history, poetry, romance, etc. It is published by Dawson Bros., Montreal. Price, $1.

We regret to learn that Dr. Bell, Medical Superintendent of the Montreal General Hospital, has been prostrated with typhoid fever. We trust that the attack is not a serious one, and that he will soon be able to be about again.

NEW MEDICAL TARIFF, QUEBEC.—The new Medical Tariff for the Province of Quebec, has recently been issued. Copies may be obtained by addressing Dr. Belleau, Quebec, or Dr. F. W. Campbell, Montreal,

CORONER.—Dr. R. W. Bell, of Peterboro', has been appointed associate coroner for the county of Peterboro'.

CHEAP AND VALUABLE READING.—Back numbers of "London Lancet," (Am. reprint), for four years; London "Medical Times and Gazette," (weekly)—not second to "Lancet,"—four years; "New York Med. Journal," five years; and "Scientific American" for three years, may be had—the lot very low—as the owner has no use for them. Cost $75 originally. Apply to Messrs. Dudley & Burns, 11 Colborne Street, Toronto.

The death of Dr. Foulis, of Glasgow, of diphtheria, is noticed in our foreign exchanges. His name is best known in connection with his successful cases of extirpation of the larynx.

Books and Pamphlets.

DISEASES OF OLD AGE. By J. M. Charcot, M.D., Professor in the Faculty of Medicine of Paris, etc. Translated by Leigh H. Hunt, B.Sc., New York; with additional Lectures by Alfred L. Loomis, M.D., etc. Published as the June, '81, number of "Wood's Library of Standard Medical Authors."

This book contains 31 lectures; the first 21 of which, we are informed, are by Charcot, and the remaining 10 by Dr. Loomis. We mention this fact merely for the benefit of those who might fail to detect the boundary line between the production of the eminent French Professor, and his trans-atlantic admirer, who has had the business tact of availing of the favorable opportunity of presenting his contributions to medical literature, in company with those of one of the most brilliant scientific writers of the present age. It is, however, our impression, that to a very respectable minority of readers no premonition will be requisite. The transition from Charcot to Loomis must, to every observant student, be as obvious as that of a stratiform break to the eye of a working geologist: not indeed that we would be understood as implying that Dr. Loomis' part of the volume is undeserving of careful perusal. His observations on "Senile Pneumonia, Senile Bronchial Catarrh, Asthma, and Hypertrophy of the Prostate Gland," are well deserving of attention, and had they been presented in a separate and comprehensive work, we think the author would have evinced more delicate discretion. If the object of the Messrs. William Wood & Co. has been mainly to swell their June number up to a predetermined bulk, so as to give to subscribers a fixed normal quantity, it would be wrong to censure their honesty of purpose; still we think they might have selected from their abundant supply, as an addendum to Charcot's lectures, some little monograph in closer affiliation.

Of the 21 lectures by Charcot, it would be impossible to speak in terms too highly commendatory. If, however, we should signalize any as deserving of special attention, those on Clinical Thermometry seem to us to have high claim. The following passage, as bearing upon a very important criminal case recently tried in Montreal, we regard as not uninstructive:

"It is undoubtedly on account of inanition that a more or less enduring fall in temperature has been quite frequently (Wolff) observed in subacute and chronic mania, with symptoms of depression, chiefly melancholia, attended with stupor. But the interpretation we offer cannot be applied to all cases of this kind. Quite recently, indeed, Dr. Löwenhardt, of Sachsenberg, has reported two cases of insanity where the rectal temperature reached the almost incredible points of 31°, 32°, and 32.5° C. (87.8°, 89.6°, and 90.5° Fahr.), persisting several weeks, while nutrition did not appear to be affected in any noteworthy degree. One of these patients was excitable, the other erotic, and both took sufficient nourishment."

In the case above alluded to, that of *Haywern*, who is now under sentence of death in Montreal gaol, Dr. J. Howard testified that he had found the temperature (only axillary, most probably) 92.5° Fahr., but three (we believe) distinguished physicians testified that they had never met with so low a degree unless in moribund persons, and the Judge characterized Dr. Howard as a blind enthusiast! The old adage, "*ne sutor ultra crepidam*," is an admonition that might profitably not be ignored either by learned judges, or by medical witnesses; "there are more things in heaven and earth than their philosophy may have dreamt of." A few years ago two conceited surgeons, of London, swore that a lunatic could not have two or three ribs broken, without giving indications of subsequent pain. Every asylum physician in Europe and America laughed at their stilt-walking ignorance. Dr. Howard may now very excusably turn the tables on his poorly-read confrères. With

the corroboration of Charcot, Wolff and Löwenhardt, Dr. Howard may well afford to disregard the pedantic criticism of his medical opponents, and the opprobrium cast on him by a judicial cobbler, who, overlooking his last, sticks his awl into his own thigh.

General Index to Ziemssen's Cyclopædia. New York: Wm. Wood & Co. Toronto: Willing & Williamson.

The profession are much indebted to Messrs. Wood & Co. for the admirable manner in which they have issued this most elaborate and comprehensive work. The 18th and 19th volumes we presume have been judged more suited for a German stand-point of State Medicine and Hygiene, therefore Dr. Buck's two volumes on Public Health have been furnished the subscribers in lieu. On reference to the index, all the articles in the 18th and 19th volumes—which we have not received, consequently conclude have not been translated for this edition — we find to be on subjects directly or indirectly bearing on hygiene. The index is numbered volume xx. and contains no less than 499 pages. Comment is needless on the exhaustive nature of a work that requires for index 499 closely printed pages.

A Manual on Diseases of the Eye and Ear. For the use of Students and Practitioners. By W. F. Mittendorf, M.D. New York: G. P. Putnam's Sons.

The Author has managed to compress into one volume of moderate size a pretty full account of the diseases of both the eye and ear—a combination which will be appreciated by many. The work embodies the recent advances on these subjects, and will prove an excellent text-book for advanced students, as well as a reliable guide for general practitioners. The value of the book is enhanced by ophthalmoscopic plates from the works of Liebreich and Wells', and coloured illustrations from Sichel's Atlas; and also by a plate shewing various appearances of the drum-head after Politzer.

Championniere's Antiseptic Surgery. The Principles, Modes of Application and Results of the Lister dressing. Translated from the French by Frederic Henry Gerrish, A.M., M.D., Bowdoin College, Maine. Portland: Loring, Short and Harmon. Toronto: Willing and Williamson. Price $2.25.

This is the first work on Antiseptic Surgery published in America, and should be in the hands of every practitioner who desires to treat wounds by the Listerian Method. It contains all the information necessary to enable any medical practitioner to apply this dressing without difficulty, and in full consonance with the Listerian theory. While all may not agree as to the necessity and utility of this method of treating wounds, none should be ignorant of the details and the theory upon which the practice is based. All this is fully taught in the volume before us.

The Physicians Hand Bood for 1882, by W. and A. D. Elmer, M.D. New York: W. A. Townsend, Publisher.

This work has been published for nearly a quarter of a century, and is no doubt well known to the profession in Canada and the United States. It contains features entirely different from other visiting lists. It is not only a visiting list, but also a ready reference book on diseases and their appropriate remedies, and contains a long list of remedial agents and their doses. The United States Government has adopted it for the use of the medical officers of the army and navy.

The Medical Record Visiting List for 1882. Published by Wm. Wood & Co., New York.

This list is arranged for 30 or 60 patients, and is very neatly gotten up, of convenient size, and handsomely bound and finished. In this latter respect it is superior to many in the market. It has one drawback however, especially for city practitioners, viz.: there is no column for the street or number of the residence of the patient. We hope to see this defect remedied in future editions.

Births, Marriages and Deaths.

On the 27th of September, J. H. Morrison, M.A., M.D., F.A.Sc., of St. John, N. B., to Ida, youngest daughter of Thomas W. Kierstead, Esq., of Rothsay, N. B.

On the 16th of November, J. L. H. Neilson, M.D., Surgeon-Major "B." Battery, to Wilmot, eldest daughter of Major J. B. Ridout, Kingston, Ont.

In Detroit, Mich., on the 22nd October, Dr. N. Munro, formerly of Brucefield, Ont.

At Stella, Amherst Island, on the 24th of Oct., William G. Middleton, M.D.

On the 17th of November, Dr. A. McMichael, of Gorrie, aged 41 years.

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Original Communications.

ELECTRICITY IN THE TREATMENT OF SPECIAL DISEASES.*

BY A. M. ROSEBRUGH, M.D. SURGEON TO THE TORONTO EYE AND EAR DISPENSARY.

Read before the Toronto Medical Society, Dec. 1st, 1881.

ELECTRICITY IN INSANITY.

The first systematic use of electricity in the treatment of mental diseases, according to Althaus, was made in France in 1845. Teilleux and Auzouy found that although it was no specific, it nevertheless did good in well selected cases. Remack and Benedict report favorably of its use, and Dr. Arndt of Griefswald, who has given special attention to the subject, asserts that electricity is an invaluable remedy, of equal importance with quinine, iron and baths, and of far more importance than narcotics, in the treatment of insanity. In 1873, Drs. Williams and Newth of the Sussex Lunatic Asylum, and Dr. Bryce of the Alabama Lunatic Asylum, reported favorably of the use of electricity in mental diseases. Dr. Bartholow states that the treatment of psychical disorders by electricity has been productive of some very striking results: and Drs. Beard and Rockwell predict that an important future is in store for the scientific and faithful use of electricity in our public and private asylums.

Up to the present time, the best results seem to have been obtained in those forms of insanity associated with or dependent upon debility and nervous exhaustion. Arndt recommends "peripheral faradization" (general faradization?), and Bartholow,—a modification of central galvanization. Beard and Rockwell recommend central galvanization as the best means of influencing the central nervous system, and in cases associated with bodily depression, they would alternate central galvanization with general faradization. They make the first tentative applications very cautiously, and the strength of the application and the time of the sitting gradually increased, as the patient is able to bear the treatment.

Dr. Clifford Albutt of the West Riding Lunatic Asylum, Leeds, uses galvanism in acute primary dementia, in mania, and in atonic melancholia. He states that in mania and in atonic melancholia, distinct improvement takes place, and that in acute primary dementia the improvement is marked.

SPASMODIC DISEASES.

"Of spasmodic diseases this general law holds, that when recent, even though violent, they yield readily to electrical treatment; but when long-standing, they are easily palliated, cured with difficulty, and are prone to relapse."—(Beard and Rockwell).

According to Bartholow, there is no fact in regard to galvanism more conspicuous than its power to allay spasms; that when a strong (continuous) current is passed through a muscle, irrespective of direction, it remains quiescent and relaxed until the current is broken.

In *Writers' cramp* the treatment should be adapted to the condition present—whether local and muscular—local and nervous, or whether the affection arises from intra-cranial lesions. To the muscles fatigued from over use, the galvanic current is applied, and to the muscles affected with paresis, and degeneration, the faradic current is applied. The individually affected muscles are picked out and the current applied with Duchenne's small electrodes. The current should be just strong enough, when interrupted, to cause contractions, and the muscles should not be fatigued by long applications. In some cases the galvanic current is also applied to the upper part of the spine, and to the median and radial nerves. Or the positive electrode may be placed over the cervical plexus and the descending current applied by the labile method to all the muscles from the shoulder down. When there is anæsthesia, the faradic current and the metallic brush should be used. Systematic gymnastic training is recommended, and rest from occupation is said to be almost imperative.

Torticollis or wry neck, in the early stages, may be cured or relieved by electrical treatment alone. Spasm of the muscles of the neck on one side

* Continued from page 101.

causes the head to be turned to the opposite side, where the muscles become flabby and weak. The treatment consists in passing a localized galvanic current through the contracted muscles, and the faradic current through the relaxed muscles. Beard and Rockwell use mild currents, but Bartholow uses 30 to 40 cells of the galvanic battery for the tense and rigid muscles, and a faradic current strong enough to throw the weak muscles into very active contractions. He makes each application last about five minutes.

Epilepsy is treated by Rockwell apparently with encouraging results. He uses general faradization and central galvanization alternately, the patients being treated every other day, and the treatment continued for several months.

Rheumatism and Gout.—Rheumatism is a constitutional disease and requires constitutional treatment. The best results are obtained by general faradization, central galvanization, and the alternate galvanization and faradization of the affected joints. Swollen joints are treated by mild and steady currents,—the application being made, preferably, with the positive electrode. Prolonged local applications of the galvanic current may be tried for anchylosis. "The most uniform results are obtained in the muscular form; the next best are the subacute and acute, and the least satisfactory of all in the chronic stages." In *lumbago*, *pleurodynia*, and *stiff neck*, mild currents, either the faradic or the galvanic, are used locally. In lumbago, some authors prefer strong galvanic currents, one pole being placed on each side and the current applied transversely. An attack of *myalgia* may sometimes be completely cured by a single application of a mild faradic current, *prolonged for one or two hours.*

In *gout*, in the chronic form, general faradization and central galvanization are to be tried, with a view of raising the tone of the system. Local faradization seems to be of service in some cases; the pain may be temporarily relieved by either the galvanic or the faradic current, the positive electrode being used and the current not strong enough to increase the pain. In *muscular rheumatism with paralysis*, the interrupted galvanic current is used, and in chronic articular rheumatism, dry faradization of the skin around the joint is preferred by some. Stimulation of the trophic system, by means of galvanization of the cervical sympathetic, will assist the absorption of nodosities about joints.

HYSTERIA AND ALLIED AFFECTIONS.

Under this head, Beard and Rockwell include hysteria, nervous exhaustion. hypochondriasis, melancholia, spinal irritation, and insomnia; and claim that for this class of diseases electrical treatment is especially adapted and in which its success is most remarkable.

It is in the treatment of these affections that these authors seem to have had their greatest success in the use of their methods of general electrization. Hysteria and hysteroid affections all depend, they affirm, upon constitutional disease, and are most successfully treated by the tonic and sedative influence of general faradization and central galvanization.

In hysteria, in addition to the constitutional treatment by general electrization, paralysis or rigid contraction of certain muscles will require localized treatment,—the former by the faradic and the latter by the galvanic current. In cases of extreme hyperæsthesia, Benedikt recommends the patient to be placed under chloroform before applying general electrization, and using strong currents.

In *hypochondriasis* and *melancholia*, galvanization of the cervical sympathetic is used in addition to general faradization and central galvanization. The positive electrode is applied to the sympathetic, beneath the ear; the negative electrode is placed on the back of the neck, and a current of 10 or 12 cells used for about two minutes. The negative electrode is then removed from the back of the neck and placed over the stomach, and the positive is applied to the head, neck and spine, as recommended in central galvanization.

In *nervous exhaustion* or general debility (neurasthenia), the electrical treatment is by general faradization and central galvanization. General faradization alone is said to be rapidly efficacious in some cases. The electric treatment, however, in these cases is simply to supplement other treatment.*

* Nerve tonics, such as strychnine, phosphorus, arsenic, etc., are given internally, and rest, diversion, etc., enjoined upon the patient. Dr. Weir Mitchell, in the treatment of nervous subjects, proposes to improve nutrition by seclusion, massage, inunction of fat, and a method of general faradization by means of localized faradization of all the superficial muscles.

Spinal irritation is part of the hysterical constitution and requires the same constitutional treatment. In addition to the treatment by general faradization and central galvanization, the galvanic current is applied separately to the spine and cervical sympathetic; and in case of tenderness, counter-irritation is applied over the sensitive vertebræ, and phosphorus or strychnine administered internally.

In the treatment of *insomnia*, it is claimed that there is no remedy which permanently relieves the symptoms in so large a proportion of cases as electricity. Improvement in sleep appears to be one of the earliest effects of a course of general electrization,—"a result of the improvement of the morbid condition on which the insomnia depends." Simple wakefulness, unaccompanied by disease, may be relieved either by the application of the faradic current to the head and spine, the application of the galvanic current to the head and sympathetic, or by general faradization.

Diseases of Women.—According to Rockwell, the diseases peculiar to women in which electrical treatment has been most successful are amenorrhœa, dysmenorrhœa, and menorrhagia. Tripier in France and Burtholow of Philadelphia were among the first to advocate the treatment of structural diseases of the uterus by galvanism. In cases of chronic metritis, congestion without plastic effusion, sub-involution, etc., the latter author finds both the faradic and the interrupted galvanic current highly serviceable. The faradic current has also been used instead of ergot in cases of uterine inertia, post-partum hæmorrhage, and retained placenta. It has also been used for the expulsion of polypi, moles, and hydatids. The faradic current is used in all cases requiring the muscular action of the uterus, while the galvanic current is preferable when nutrient changes have taken place.

In cases of *amenorrhœa*, dependent on anæmia, chlorosis, or nervous exhaustion, the constitutional condition is treated by internal medication and by general faradization, without applications directly to the uterus.

In the treatment of *dysmenorrhœa* by electricity, the results are said to be brilliant, even after years of ineffectual treatment by other means. Internal applications are usually not necessary. Either the faradic or the galvanic current may be used, but the best results are claimed for the latter. O electrode is placed on the lumbar spine and t other on the hypogastric region. The current fro 12 cells is applied for about five minutes, three four times a week. The galvanic current is appli to the whole length of the spine as well, and some cases general faradization is also used.

In cases of *menorrhagia*, free from organic d ease, and occurring near the climacteric perio general faradization is employed, when there inactivity of the liver and constipation, associat with nervous exhaustion.

MISCELLANEOUS DISEASES.

Diseases of the Organs of Digestion.—In the tre ment of disorders of the digestive tract, the farad current is preferred. It acts more vigorously the muscles and produces more powerful mecha cal effects. One electrode (usually the negativ is applied to the feet, coccyx, or spine, and t other electrode is applied to the abdominal visce Or the patient may be treated by general faradi tion. General faradization is also useful in nervo dyspepsia, from its influence more especially the nervous condition upon which the dyspep depends. General faradization is also used diarrhœa and constipation, and is held to beneficial from the improvement in nutrition th follows this method of using electricity. In obs nate cases of constipation, one electrode may placed in the rectum, and the other applied different points on the abdomen. Strong curre may be used.

Diseases of the Bladder.—Incontinence of uri is frequently associated with hysteria and spin irritation, and requires treatment for the constit tional condition. When the affection is pure local, it is treated by strong faradic currents directe through the neck of the bladder. One pole placed over the symphysis pubis, and the oth over the perinæum, in males, and over the low part of the sacrum in females. In recent cases an in the young the prognosis is said to be favourabl but depending, of course, upon the nature of th malady with which the incontinence is associated

"Paresis and paralysis of the bladder so fre quently depend on incurable diseases of the spine that the prognosis is, as a rule, unfavorable as re gards a complete cure. Relief and improvement

even in very bad cases, may be gained by faithful treatment, but entire recoveries are exceptional.

"The *treatment* should be external and internal, with both the galvanic and faradic currents, combined with central galvanization.

"*External* applications may be made, placing one pole, the negative, over the symphysis pubis, and the other on the back, or at the nape of the neck, and passing very strong faradic currents with interruptions.

"*Internal* applications may be made either with the insulated catheter electrode, or with Duchenne's double vesical electrode.

"The catheter electrode may be connected with the negative pole while the positive is at the hypogastric region or back. By means of the double exciter of Duchenne the current can be more exclusively localized in the muscles of the bladder than by any other method." (Beard and Rockwell.)

Impotence is also treated by electricity. When it depends upon disorders of a general character, such as the immoderate use of sedative narcotics, sedentary habits, or mal-nutrition from any cause, it demands "the general constitutional tonic influence of general faradization." The local treatment is by placing one pole on the perinæum and the other on the testicles (the testicles may be placed in a cup of warm water in which one pole of the battery is immersed). Either current may be used, but the faradic current is preferred, and the application is not extended beyond ten minutes, "Impotence like seminal emissions, may sometimes be treated by connecting the steel sound introduced into the urethra with one of the poles of the faradic current, thus combining the toning effect of pressure with the toning effect of electricity on the relaxed parts." (Beard & Rockwell).

Exophthalmic Goitre.—Graves' disease, which is supposed to be due to ennervation of the sympathetic, according to Rockwell, is almost invariably benefitted by galvanism. The anophthalmia and the enlargement of the thyroid gland do not always disappear, but the violent palpitation which constitutes the most distressing symptom according to this author, is decidedly and permanently alleviated. The positive electrode is placed just above the sixth cervical vertebra, and the negative in the auriculo-maxillary fossa. The negative electrode, after remaining in this position one minute, is gradually moved down along the inner border of the sterno-cleido-mastoid muscle to the sternum. A current from 6, 8, or 10 cells is used and this part of the application should not last longer than two or three minutes. The negative pole is now removed to the epigastrium (the region of the solar plexus) and the positive placed again in the auriculo-maxillary-fossa and 18 or 20 cells used. The positive electrode after remaining about one minute in this position, is gradually moved to the back of the neck where it is allowed to remain one or two minutes longer,

Sequaelæ of Acute Diseases.—Dr. Rockwell uses electricity for the relief of the varied symptoms that follow cerebro-spinal meningitis, diphtheria, and intermittent fever. In the treatment of the sequelæ of cerebro-spinal meningitis, he relies upon galvanization of the spine and central galvanization. For the paralysis following diphtheria he finds in most cases general faradization is sufficient without localized applications. In chronic cases of intermittent fever, after the use of quinine and other tonics, he uses general faradization, not as a specific, but for its beneficial influence over the processes of secretion and excretion, and for its constitutional effects.

Electrolysis, galvano-cautery and the treatment of diseases of the eye, ear, nose and larynx by electricity, are subjects, the discussion of which must be reserved for another occasion.

ON DIPHTHERIA*.

BY H. K. KERR, M.D., C.M., F.T.M.S., HAMMOND, N.Y.

Ætiology:—Diphtheria is an acute specific disease, highly infectious, contagious, and sometimes epidemic. It is held by some that the propagating germs of the disease are contained only in the throat deposit, but careful research warrants the conclusion that they are given off from the breath and also present in the excretions of the body. It appears to be more contagious than infectious, as those who are in constant attendance on diphtheritic patients, inhaling their breath and exposed to the liability of having the diseased products coughed out upon them, contract the disease more readily than others who may live in the same dwel-

* Being a Thesis for the M.D. Degree in the University of Trinity College, Toronto.

ling, but who are not in such close contact with them.

The infection lasts for a considerable time after convalescence and clings to houses, rooms, furniture, etc., and especially so if hygienic measures have not been thoroughly attended to. Some authors doubt the possibility of inoculation with the deposit. No such doubt, I think, need exist. My predecessor, Dr. F. R. Sherman, of Hammond, N.Y., caught it in this way. He assisted in performing tracheotomy on a patient with primary laryngeal diphtheria of a malignant type. During the operation a tenaculum pulling suddenly through the tissue scratched his finger deeply. He neglected the wound until after the operation. It inflamed in a few hours, showing the diphtheritic canker. He was taken down with the disease in its worst form and died in the course of a week.

A sporadic form of the disease is recognized, resulting from bad drainage, etc., but imperfect hygienic conditions are not so much a cause of diphtheria as of low fevers.

Predisposing Causes—Age, sex, climate, susceptibility, exhaustion, and nervous irritability. The age most favorable to an attack of diphtheria is put down at from five to ten years. From four to fifteen years is quite as near the mark. No age is exempt. I had under medical treatment recently, a child only ten months old with diphtheria, and know of a man of 76 years who also had the disease not long since. Sex is generally supposed to make no difference. I think, under certain circumstances it does. Girls seem more liable to contract the disease from 15 to 18 years than boys of that age. The termination appears less favorable in adult females than in adult males. Hot dry seasons favor the spread of the disease. Heavy autumn rains and moist depressing atmosphere frequently act in the same way. Some families are more susceptible to the disease than others, and the same may be said of individual members of a family. Some are so predisposed to it that they might be said to be of a *diphtheritic diathesis*. In such the disease is often of a malignant nature, not unfrequently carrying off almost entire households. Again it may be of a mild type with a susceptibility to frequent attacks.

Exhaustion due to previous disease, nervous irritability, over-exertion, dissipation or any cause that reduces the vital energies of the system, predisposes to the disease and obscures the chances of a successful termination.

Anatomical Characters—Swelling and inflammatory redness of the soft palate, tonsils, etc., followed by the appearance of patches of exudation of a yellowish white or grayish color. These coalesce forming a parchment-like membrane, covering the mucus surface of the fauces, extending to the mouth and nose and sometimes into the conjunctiva, trachea, œsophagus, stomach, etc. There is an increased flow of viscid secretion, the tongue covered with a dark grayish or brownish coating. The diphtheritic membrane becomes thickened by the formation of additional layers underneath. When removed it carries most of the epithelium with it, revealing the formation of ulcers. The lymphatic glands at the angles of the jaw become inflamed and enlarged. The neck may be considerably swollen owing to the infiltration of serum into the surrounding tissues. After death the various organs of the body are found to be congested, collapse or insufflation of the lungs, coagula in the heart and great vessels, parenchymatous inflammation of the kidneys, enlargement of the spleen and absorbent glands are the abnormal conditions, some or all of which are usually found.

Symptoms—The incubation period ranges from 48 hours to a week, usually from two to four days. There is a feeling of lassitude, diffused pains, chilliness, anorexia, increased temperature, headache, nausea, drowsiness, stiffness and soreness about angle of jaw, increased on swallowing. Much enlargement of the cervical glands and intense redness of the throat indicate a severe attack. The throat symptoms and the severity of the constitutional condition may, however, bear no necessary relation to each other. Articulation may be difficult and imperfect, and taste and hearing interfered with. There may be vomiting and diarrhœa, followed by convulsions and coma. The skin is natural, tongue thickly coated. On examination, the fauces, tonsils and uvula are found to be inflamed and swollen, in some instances almost entirely filling up the throat. There is much redness with more or less diphtheritic deposit. Enlargement of the glands at the angles of the jaw and tumefaction of the tissues of the neck are always present. There is a frequent desire to hawk, the false membrane being coughed up in pieces. The infection of the nasal passages is indicated by a

sanious discharge from the nose and posterior nares. Infection of the larynx is indicated by a hoarseness of the voice, croupy character of the breathing, paroxysmal exacerbations of dyspnœa, etc. The breath and emanations of the body become extremely fetid. Hemorrhages may occur, epistaxis being quite common in bad cases; urea is largely in excess.

Varieties—The different forms run into each other and are sometimes difficult to distinguish, but the classification of Sir W. Jenner is the nearest perfect. Mild form: Symptoms chiefly local, slight stiffness and soreness at the angles of the jaw, redness and some inflammatory exudation on the tonsils and soft palate. There may be more or less pyrexia, soon passing away. Recovery is speedy, without complications, and followed by no sequelæ.

Inflammatory form: Symptoms, local and general. Patient very ill, temperature high, much depression, pulse feeble, tonsils, uvula, glands of neck, etc, much enlarged, rapid appearance of exudation deposit, much inflammation of the throat followed by ulceration and sloughing. There may be laryngeal complications, indicated by croupy breathing—urine febrile, with albumen and casts.

Insidious form: Symptoms as a rule not urgent—may be no general disturbance, excepting malaise, until laryngeal complications set in, indicated by wheezing, crowing respiration and followed by depression, prostration and suffocation.

Nasal form: Chiefly characterized by a fetid discharge from the nose, posterior nares, etc. There is low fever, throat inflamed and much swollen. Larynx may be suddenly attacked or recovery may take place on subsidence of symptoms.

Primary Laryngeal form: The larynx is the original seat of the disease in this form. Exudation may extend to pharynx, trachea, bronchi and lungs. Very fatal, not easily distinguished from membranous croup.

Asthenic form: Symptoms are of a typhoid character from the outset or shortly after the disease has asserted itself. There is much depression and prostration. Patient becomes sallow or dusky yel low colored, pulse weak, small and irregular, tongue covered with a dry brown coating, with sordes on lips and teeth. There is extensive ulceration of the soft structures of the throat. The amount of throat deposit is variable, usually soft and pulpy. The breath is very diagreeable. Delirium supervenes followed by death.

Complications—The kidneys are liable to be affected. An abnormal condition of the epithelium of the tubes is sometimes followed by parenchymatous inflammation. The urine is diminished in quantity, sometimes suppressed. It may contain albumen and casts. The disease may extend to the trachea and bronchi involving the lungs. Insufflation, lobar or lobular pneumonia, giving way of air vesicles, collapse and pulmonary apoplexy are complications not unfrequently met with. An erythematous rash, and purpuric spots on the skin are sometimes noticed—the latter in very severe cases. Hemorrhages from the mucous passages are not uncommon, chiefly epistaxis. Sequelæ very liable to follow bad cases of diphtheria. Recovery may be slow with the presence of considerable albumen in the urine for a time. Nervous disorders are the more important—paralysis, motor and sensory. It may affect the pharynx and palate, interfering with deglutition and articulation only. Two or three weeks usually elapse before these symptoms show themselves. They may last from three weeks to three months. About the end of the second month is the most critical time. A continuance of the paralysis after this period may be regarded as serious. Fortunately the paralysis is due to a poisoned condition of the blood, and not to abnormal condition of the nerve centres. True diphtheritic paralysis is a serious complication. It commences with the throat, palate, etc., and extends progressively to other organs. There is much difficulty in swallowing, the food regurgitating through the posterior nares. Articulation becomes very imperfect, sometimes the power of speech is entirely lost. The mucous membranes become affected and the special senses impaired. The sense of smelling is either absent or perverted. The ciliary muscles become paralysed, preventing the proper adjustment of the eye. The limbs are next affected. The muscles are more or less paralysed, accompanied with numbness and tingling of the skin. The muscular tissue may continue to waste until the patient is unable to stand. The bladder becomes atonic, causing retention of urine; constipation is not uncommon as a result of paralysis of the abdominal muscles. When the muscles of respiration are affected difficulty of breathing is experienced. Respiration may cease entirely, due to this cause.

Paralysis of the heart may come on slowly, reducing the beats until it stops entirely. The nerves are subject to a painful sensation of a neuralgic character, often very severe. Adults mostly recover when the heart and respiratory organs are not implicated. In children, nervous sequelæ are often fatal.

Duration—The disease may last from a few days to two weeks, but complications may extend it to three weeks, a month, or even more. Relapses are apt to occur through exposure to cold, etc., after apparent recovery.

Termination—The chief dangers are (1) suffocation, mostly in those under five years, generally taking place during the first week. (2) Asthenia, generally in adults occurring after first week. (3) Uremia, Septicemia, etc., in cases in which the poison is so virulent and the system so impregnated with it as to cause death before the symptoms have time to fully manifest themselves. (4) Pulmonary complications, disease extending down respiratory passages affecting lungs, etc. (5) Secondary nervous phenomena, progressive paralysis of throat, tongue, eyes, limbs, bladder, etc., death resulting through general marasmus or interference with the action of the heart.

Prognosis—The prognosis is always serious, as grave symptoms may set in at any time. About one half the deaths from diphtheria, in children, result from formation of croupous membrane. Severe cases are more likely to be followed by severe sequelæ. The dangerous symptoms are, difficult cranky breathing, extensive ulceration of the soft structures of the throat, epistaxis, constant discharge from the nose of a fetid sanious fluid, weak, irregular, thready pulse, intermittent action of the heart, retention or suppression of urine, high color of urine with presence of much albumen, bloody casts, etc. A persistent high temperature is always serious.

Treatment—The strictest care and attention is necessary in every case of diphtheria. In bad cases the patient must take to bed at once and remain there until convalescence has set in. The atmosphere should be kept moist and a uniform temperature of 68° should be strictly maintained. In the case of children, tubing may be employed to convey steam into the tent arranged over the crib in which they lie. Disinfectants are to be freely used, and due ventilation and cleanliness rigidly attended to. Any clothes used in wiping away discharges from the nose or eyes should be burnt. Care should be taken to prevent children and others from coming in contact with the patient unnecessarily. The atmosphere can be kept moist by means of the steam from a tea kettle kept boiling in the room with carbolic acid water. Inhalations of the vapor of hot water and slaking lime are invaluable and should never be omitted in serious cases. It is advisable to have all unnecessary clothing, furniture, curtains, etc., removed from the room as the contagium clings to these for an indefinite period. The apartment should be large, well ventilated, and as cheerful as possible. The bowels should be kept regular. If there is a tendency to constipation, a mild saline mixture may be given but avoid purgation. Patient to be nourished with milk, lime water and beef tea. Stimulants are not required at the outset for children but should be resorted to when the heart's action is weak, and the imperfect circulation and coldness of the extremities show that the vitality of the system is flagging. I am not unwilling to believe that in adults good brandy in full doses may be valuable at the onset of an attack. The temporary impregnation of the system with the *alcoholic* poison seems to fortify it against the encroachments of the *diphtheritic*. Metaphorically speaking, "the devil divided against himself cannot stand." If the patient cannot or will not swallow, enemata of milk, egg, brandy, etc., may be administered.

As soon as diphtheria is diagnosed, hot irritating applications should be applied to the throat extending to the ears on each side. Two or three layers of flannel, saturated with a mixture of kero sine, collodium, turpentine. etc., answers this purpose admirably. Kerosine alone is often all that is necessary. Pork and mustard also answer the purpose very well. Warm fomentations of hops are good for their soothing effect. These may remain until a considerable amount of counter-irritation is set up, when they should be discontinued for a time and then re-applied. In the *interim* other cloths should be put around the neck to prevent external cold. Pieces of chopped ice should be sucked by the patient, as the cold internally is grateful and does good. Theory: The cold internally *drives* out the inflammatory congestion by its depressing effect, contracting capillary vessels, etc.,

the heat externally *draws* out the inflammation by its counter-irritant and derivative action.

There is no specific for diphtheria. Internally, tr. ferri mur., glycerine, etc., in full doses, with quinia sulph., pot. chlor., glycerine, etc., constitute the chief medicinal treatment. Saturate the system with iron. Carbolic acid dil., and a mixture of tr. ferri mur., acid hydrochlor. and pot. chlor., make good gargles. The former may be applied in spray. Permanganate of potash is also used with much benefit, when the ulceration is extensive. Nitrate of silver, in strong solution, is used for the same purpose, the ulcers being touched with the solid stick. I have never used the nitrate of silver. Ferri sub-sulph. and carbolic acid are valuable for the removal of the membrane. Sulphur should be dusted every hour or two on the cankerous surface. In children it may be blown in with a quill. For children, quinia sulph., etc., may be mixed with syr. sarsæ. co. It makes a pleasant preparation and they take it readily. Saline drinks of citrate of potash are cooling, grateful and beneficial. The nasal passages may be washed out when necessary, with carbolic acid injections.

Look out for complications, and treat them as they appear. For suppression of urine, apply hot poultices, fomentations, etc., over the loins. Dry cupping sometimes does good. Stimulate, when the vital functions begin to flag. When laryngeal complications set in, an emetic *may* give temporary relief. Some of the morbid products are got rid of, and breathing will be performed more readily for a time. To prevent suffocation, laryngotomy or tracheotomy may be performed. The former is more suitable for adults, the latter for children. Temporary relief is thus afforded, but recovery from this condition is rare.

During convalescence, a change of air and surroundings is highly beneficial. Diet should be healthful and nutritious, with a sufficient amount of exercise to exhilarate, but not to tire. Tonics of iron, quinine, strychnia, mineral acids, etc., are valuable during this stage.

NOTE.—Out of 19 cases treated in this way during the last four months, 17 recovered. Several of the cases were of a malignant type. In severe cases, inhalations of the vapor of hot water and slaking lime is *most valuable* and should never be omitted—repeated, at least, every half hour. Both fatal cases were children, about 4 years old. One had an insidious form of the disease and was not placed under treatment until far advanced; the other persistently refused all treatment—so that in neither case was there any chance. These facts are offered for what they are worth, as tending to show that, with the strict carrying out of this line of treatment, the mortality of this fearful disease can be reduced almost to a minimum.

THE ANTISEPTIC TREATMENT OF PHTHISIS.

BY D. LESLIE PHILIP, M.D., BRANTFORD, ONT.

(Read before the Brant Medical Association, Dec. 6th.)

Phthisis is now being treated with reported success by the continuous inhalation of the vapor of carbolic acid or other antiseptic agents by means of an almost constantly worn respirator.

"It is fair to infer says the *British Medical Journal*, that the application to internal suppurating surfaces of an agent which has been used in similar cases externally with such benefit, will be equally efficacious in checking the growth and development of morbific germs, and thus allow tissues to be reconstructed." Recent researches on tubercular disease and the nature of tubercle have excited great attention, and the teachings of some of the German pathologists, notably Virchow, are subversive of what we have been taught regarding its nature, and especially with regard to the relation which it sustains to inflammatory processes, some of the leading pathologists maintaining the view that the inflammatory process is primary to tubercle, and utterly denying the tubercular nature of many of the processes engaged in phthisis pulmonalis. Without attempting to give the views recently enunciated by them in this extensive field of enquiry, I would like to direct the attention of the Association to a new method of treatment with which we are more immediately concerned, and which has been used with a considerable degree of success during the past year, by Dr. G. Hunter McKenzie, of Edinburgh, judging from the published report of his cases. He was probably led to adopt this method of treatment from the views recently set forth as to the septic and eminently contagious character of tubercle—I allude to the inhalation of the vapor of carbolic acid or other antiseptic agents for lengthened periods, as

practised by that gentleman with apparently highly beneficial results. The inhalation of vapors in lung diseases has long been practised, but the mode of administration has been so defective that the practice has to a great extent fallen into disuse. It has also been adopted by advertising charlatans, in an imperfect way, and has thus helped to bring it into undeserved disrepute with the profession. It is now, however, as a rational method of treatment, extensively employed by leading and eminent medical men with, no doubt, the happiest results.

Late investigation goes to show that phthisis pulmonalis is eminently contagious, and may be propagated by direct infection from man to man. Without stopping to narrate the proofs for this assertion, which I think are conclusive, it may be stated that phthisis pulmonalis is now regarded as a disease of septic parasitic origin, and readily infectious under certain conditions. Dr. Pollock, sen. physician to the Hospital for Diseases of the Chest, Brompton, in writing upon Phthisis in relation to Modern Pathology, says: "Tubercle is then not an essential element in the disease, but where found is a secondary superadded result, arising from infection or the resorption of inflammatory results in the individuals themselves. Tubercle is a short-lived product, arising from inflammatory residua which have undergone degeneration—caseation—and been conveyed into the system or to distant parts of the lung or other organs by the blood-vessels and lymphatics, or even directly by the air-tubes. Tubercle probably lives but some weeks or months, but the changes in the lung formerly ascribed to tubercle, may last for years."

Professor Charcot, in the study of the thermommetry of the disease, says: "The thermic curves are not those of inflammatory action but of putrid infection, and in the pyrexial form of phthisis, the exacerbation (of temperature) is due not to a pneumonic process, but to resorption of softened material."

If this pathology be correct, the antiseptic treatment is a rational one, and indeed the success already met with in their treatment of certain forms of phthisis after this method, by Dr. McKenzie, Dr. Max Schuller and others, should secure for it an extended trial. In order to carry it out effectually, Dr. McKenzie has devised a very ingenious little instrument which he calls the "Naso-oral respirator" which covers both the mouth and nose, and can be worn for hours at a time without the least inconvenience. The perforated lid upon the lower part of the instrument can be removed at pleasure, and a sponge saturated with carbolic acid, creasote or other volatile antiseptic agents placed within. The air in the respiratory process passes through the sponge saturated with the vapor. It is provided with inspiratory and expiratory valves, and is not liable to get out of order.

The following are the brief notes of a case which I have recently treated after this method:—Miss S., age 24, of good family history, consulted me about six months ago, complaining of general debility, cough which had been troubling her for some time, slight progressive emaciation, loss of appetite, shortness of breath upon exertion, &c. I did not make any physical examination of the chest at the time, but prescribed for her cod-liver oil with the hypophosphites which she continued to use for some weeks with benefit. I did not see her again until the 2nd of September last, when I was sent for, as she had on that morning an alarming hæmoptysis. She must have got up fully a pint of blood. I immediately ordered her to bed, enjoined perfect quietude, and gave her fluid extract of ergot and iced drinks. Upon visiting her in the evening I found that the sputum had been occasionally tinged with blood, pulse 112, temperature 102. Upon examination of the chest I found a diffused crepitant *rale* over the superior portion of the left apex, which led me to infer that the hemorrhage had come from this portion of the lung. The history of the case for the next fortnight was unfavourable—afternoon exacerbation of fever, cough troublesome, sputum now and then tinged with blood. I now caused her to inhale continuously the vapor of carbolic acid and creasote, equal parts, by means of the respirator which I had some time since procured from Edinburgh, and after the manner prescribed by Dr. McKenzie. On an average she continued to use it from eight to twelve hours a day for the next two months, with, I think, markedly beneficial results. Her improvement appeared to go on from the period when she began using it, and at the present time though not strong nor robust, she is in a better condition of health than she was formerly; appetite good, very little cough, and the only abnormality I can detect upon auscultation

is slightly prolonged expiration over the left apex. She can take a good long walk without fatigue, and says she feels better than she has done for months back. She still continues to use it for a couple of hours morning and evening each day. The antiseptic treatment is of course to be employed with appropriate constitutional remedies; in this case, however, I used none, partly because she had previously taken a considerable quantity of cod-liver oil, and had a very decided aversion to its use in any form, and I also wished to observe the effect of the antiseptic *per se*.

Should the employment of the antiseptic be local or constitutional? Dr. McKenzie says: "My therapeutical experience leads me to believe that, as shown by Matthews Duncan to be the case in some examples of puerperal fever, it is more frequently a condition of *sapremia* than *pyemia* which obtains in phthisis, that the toxemia is rather attributable to the chemical factors which putrefaction engenders than to the presence of micrococci in the tissues and blood. I therefore think that it is only by the local application of the antiseptic that good results can be obtained."

These instruments, as devised by Dr. McKenzie, may be obtained from Mr. Mills, Chemist, Brantford.

CURIOUS CAUSE OF ANEURISM.

BY J. ALGERNON TEMPLE, M.D., M.R.C.S.ENG., ETC.

(Prof. of Obstetrics, etc., Trinity Medical College, Toronto).

On the 6th of June, 1881, a young woman, æt. 24, consulted me for pain in the left knee. Six weeks previously, on going up stairs, she was seized with sudden pain in the left knee. As the pain continued for some days after, she, thinking it was rheumatism, got a liniment to rub the joint with, which however gave her no relief. At this time she did not notice any swelling. Two days before consulting me, she perceived on getting out of bed that her knee was swollen. On examination I detected a uniform swelling occupying the inner side of the lower part of the thigh, about three or four inches above the joint. This was pulsating, a distinct bruit was easily detected with the stethoscope, and by pressure on the femoral artery both the pulsation and bruit ceased. This leg measured two inches more in circumference than the right one. Recognizing the case to be one of aneurism I advised her to go at once to the hospital; she did not do so, however, for three or four days, during which time the tumor had considerably increased in size and was very painful. After her admission to the hospital a consultation was held, and there being no doubt as to the nature of the tumor, it was decided to try the effect of digital compression, which was faithfully maintained for 32 hours, by a number of medical students, who kindly volunteered their services. At the end of this time both pulsation and bruit had entirely disappeared, the leg was kept quiet in a semi-flexed position, and for four days neither pulsation nor bruit could be detected, but it gradually returned, accompanied by pain and increased swelling, which extended upwards on the thigh. As it was evident something more was necessary, a consultation was again held, and it was determined that I should cut down on the diseased vessel and ligate both ends. The patient, however, being influenced by her friends, most positively refused to submit to any surgical operation whatever, notwithstanding that I told her she must die unless she submitted to an operation. The case grew worse from day to day, and on the 2nd of July gangrene made its appearance in the foot, gradually extended up the thigh, and she died on the 6th of July.

Post-mortem.—An examination of the parts involved was made 24 hours after death. On cutting into the diseased leg a large quanity of both fluid and clotted blood was found everywhere throughout the muscular structures. A large aneurism of the femoral, where it becomes the popliteal artery was found, with a small punctured opening in it, and a quantity of organized blood clots round the opening. From the posterior and upper part of the inner condyle of the femur a spiculated outgrowth of bone was found, measuring 1½ inches in length and terminating in a sharp point. Strangely enough we found that this sharp point had penetrated the sac and was the cause of the infiltration. It was also in all probability, primarily the cause of the aneurism by injuring the coats of the artery.

SEA-SICKNESS.—Bromide of sodium taken for several days prior to embarkation is the latest remedy for sea-sickness.

Reports of Societies.

COLLEGE OF PHYSICIANS AND SURGEONS, QUE

The following is the new Tariff of fees recently adopted by the Board of Governors of this college. The items represent the maximum fees to be charges for services rendered : —

Visits from 8 a.m. to 9 p.m., not exceeding ½ mile.	$ 2 00
Visits from 9 p.m. to 8 a.m., not exceeding ½ mile, not to exceed	4 00
Visits, each additional mile, in daytime	50
,, ,, ,, ,, at night	1 00
Detention a whole day	20 00
,, ,, night	52 00
Ordinary office consultation, with prescription	2 00
,, ,, ,, ,, ,, night.	3 00
Consultation, with special examination	5 00
,, with a practitioner	5 00
,, by letter between practitioners	10 00
Ordinary certificate of health	5 00
Special certificate, attested with report	8 00
Certificate, with report on disease and death	5 00
Post-mortem examination, external	5 00
,, ,, with sectio cadaveris	10 00
Ordinary case of midwifery (subsequent attendance extra)	15 00
Turning, application of forceps, extraction of placenta (subsequent attendance extra)	30 00
Miscarriage, premature confinement (subsequent attendance extra)	15 00
For attendance with a midwife, in all cases the charge is the same as for delivery	
Catheterism, ordinary cases	3 00
,, each subsequent operation	1 00
Vaccination, bleeding, extraction of teeth, hypodermic injection, etc	1 00
Introduction of stomach-pump	5 00
Application of cupping-glasses, leeches, setons, moxa, plugging, etc	5 00
Chloroformization, or other anæsthetics	5 00
Setting fracture of the thigh	25 00
,, ,, ,, leg or arm	20 00
Reducing dislocation of thigh	50 00
,, ,, leg or arm	25 00
Amputation of the thigh	100 00
,, ,, leg or arm	50 00
Operation for strangulated hernia	100 00
Reduction of hernia by the taxis	25 00
Lithotomy, or lithotrity	200 00
Ovariotomy	500 00
Tracheotomy	50 00
Operation for cataract	100 00
Extirpation of the breast	50 00
,, ,, tonsil	10 00
Amputation of fingers or toes	10 00
Capital operations, not already specified	100 00
Minor ,, ,, ,,	25 00

The above charges for surgical operations are for the operation only, subsequent attendance and services extra.

L. LaRue, *Registrar.*

MICHIGAN STATE BOARD OF HEALTH.

We give below the following as a sample of the weekly reports to this board, of the state of health in different parts of the State :—

Reports to the State board of health, Lansing, by 63 observers of diseases in different parts of the State, show causes of sickness during the week ending Nov. 26, 1881, as follows :—

Diseases, in order of greatest area of prevalence.	Number and per cent. of observers by whom each disease was reported.	
	Number.	Per cent.
1 Intermittent fever (ague)	54	86
2 Rheumatism	49	78
3 Neuralgia	44	70
4 Consumption of lungs	44	70
5 Bronchitis	43	68
6 Tonsilitis	40	63
7 Remittent fever	32	51
8 Typho-malarial fever	32	51
9 Diphtheria	28	44
10 Influenza	27	43
11 Pneumonia	26	41
12 Diarrhœa	24	38
13 Typhoid fever (enteric)	20	32
14 Whooping-cough	14	22
15 Erysipelas	13	21
16 Scarlet fever	9	14
17 Membranous croup	8	13
18 Dysentery	7	11
19 Inflammation of bowels	7	11
20 Cholera morbus	5	8
21 Cerebro-spinal meningitis	3	5
22 Small-pox	2	3
23 Jaundice	2	3
24 Cholera infantum	2	3
25 Puerperal fever	2	3
26 Inflammation of brain	2	3
27 Continued fever	1	2
27 Conjunctivitis	1	2
28 Pharyngitis	1	2
29 Bright's disease	1	2
29 Spasmodic croup	2	2
29 Diphtheritic paralysis	1	2
30 Cancer	1	2
31 Laryngitis	1	2
31 Measles	1	2

For the week ending Nov. 26, 1881, there was a considerable increase in the area of prevalence of the tonsilitis, typhoid fever, and whooping cough reported; and a considerable decrease in that of typho-malarial fever.

Special reports have been received of one case of small-pox at Grand Rapids (Nov. 27), and of two cases at Hartford, Van Buren Co. (Nov. 28).

Henry B. Baker,
Secretary.

Lansing, Mich., Dec. 3, 1881.

BRANT MEDICAL ASSOCIATION.

The regular quarterly meeting of the society was held in Brantford, on the 7th of Dec., '81. The members present were :—Drs. Griffin, Philip, Harris, Kitchen, Clarke, and Winskel. The following gentlemen were elected officers for the ensuing year :—Dr. Kitchen, St. George, president; Dr. Sinclair, Paris, vice-president; Dr. Harris, Brantford, secretary-treasurer.

A paper was read by Dr. Philip on the "Antiseptic Treatment of Phthisis," and notes of a case of "Latent Typhoid Fever," by Dr. Harris. A long and interesting discussion took place, by all the members present, on these two papers.

After some routine business the society adjourned, to meet again at Brantford on the first Tuesday in March, 1882.

PROVINCIAL BRANCH MEDICAL ASSOCIATION.

A number of medical gentlemen from the neighbouring counties of Bruce, Grey, Huron, Perth, Dufferin, and Waterloo, met in Palmerston on the 1st of December, 1881, for the purpose of organizing a Medical Association. After some consultation it was agreed to form an Association, and that it be known as the North-Western Branch of the Ontario Medical Association. It was further determined to hold the next meeting of the Association in Palmerston on the 15th of February, 1882.

Selected Articles.

CEREBRAL SOFTENING.

BY PROF. WM. A. HAMMOND, M.D.

Case 3.—The patient was a German, fifty-eight years of age, powerfully built and healthy looking. He was accompanied by his two sons, from whom the following history was obtained: He had always enjoyed good health up to last fall, except that some years ago he had chills and fever; and four or five years ago he had an attack of rheumatism, and another about two years since. At that time the pain was chiefly in the chest and one arm which was swollen. The troubles from which he is now suffering date from September 17th, 1880. On the preceding day he had been on a little spree as was his custom once or twice a month. However, he never became so drunk but that "he could always navigate." On the morning of September 17th, just after getting up, he was leaning against the barn, and talking very excitedly to another man, with whom he was exceedingly angry. Suddenly he felt sick and dizzy. He was immediately assisted into the house and placed upon the sofa. By this time he had nearly lost consciousness, and had only enough sense to tell what had happened. It was then noticed for a moment that his head was drawn around toward his right shoulder. A spasm of the facial muscles followed, and he then went off into a regular epileptiform convulsion. He had five of these epileptiform spasms in succession. For the next two or three weeks he remained sick; and during this time he had to be fed, because he had lost the control of the muscles of the hand, so that he could not find his mouth with his spoon; and he would grasp his fork and other articles upside down. There was, however, slight, if any paralysis of the right hand. Since then he has been troubled with sleeplessness at night, and some shortness of breath, but has had no more convulsions.

The principal symptoms which he at that time presented are those which he still manifests. These Prof. Hammond endeavoured to bring out more vividly, by a personal examination of the patient.

He first asked his name. The reply after some hesitation was, "Johnny," "Sonny," "I am all over." "I didn't say," "Schordie," "George," and other such unmeaning words and disconnected phrases. When asked where he lived, he would only say, "See over there," "Some over there," and other unintelligible sounds, which could not be called words. His son said that his name was George, and that his home was in Westchester. When asked his son's name, which is John, he answered, "I know, but can't," and so on. Next a question in German was asked, "Schlafen sie wohl?" but this he did not seem to comprehend any better than the rest. When asked if he had any pain in the head he replied, "I cant." "No." But his son said that he had always before told him that he did have pain there. Whenever the patient tried to speak, his tongue seemed to go automatically, and to be entirely beyond his control. He also seemed scarcely able to appreciate the meaning of what was said. On examining the top of his head a large encysted tumor was found, which his son said had been there for years, but was growing gradually larger. It was caused by a blow from a stick, or club, and so had no connection with the present disease.

The examination being finished, Prof. Hammond now said, that he had first seen the patient two weeks ago at his office. He could then talk little or none; but since that time he had been under treatment, and was now considerably improved. He seems to know people whom he sees, but he cannot tell who they are. His speech is inarticulate, and he cannot remember names. He, therefore, has aphasia, in both its amnesic and ataxic form; and here it is due to the shutting off of the blood from a part of the brain, probably, by an embolus. He has lost the memory of some words, and the ability to pronounce others, especially nouns. But some words he can pronounce, thus showing that there is no paralysis of the tongue. Moreover, he can neither read nor write, and so has ataxia and agraphia; and he probably could not express what he means by gestures, any more rationally than by words.

In reference to such cases as the present, Prof. Hammond continued: There are two varieties of cerebral anæmia, the partial and the general. Partial cerebral anæmia may be caused by the cutting off of the circulation from a portion of the brain, as by an embolus from a distant part, or by a thrombus formed in one of the cerebral arteries, by the coagulation of the blood at some point where the internal coat of the artery has become roughened. This clot keeps back the blood from the parts of the brain which are normally supplied by the artery, and as a result of the failure of nutrition, softening of the brain substance follows. Or again, rough surgical handling of an aneurism, or an operation on it with an electrical needle, may cause a small portion of the clot to be broken off, and this becoming lodged in some small cerebral artery, may plug it, and thus form an embolus. The most common way for an embolus to form, however, is by the detachment of a heart clot; as the case of this patient illustrates.

Partial cerebral anæmia, due to an embolism, may be ushered in by any of the following symptoms: The patient is perhaps standing quietly, when suddenly he staggers and falls, and, it may be, loses consciousness. He is now, probably found to be completely paralyzed on the right side, and is also aphasic. This is the worst form, and may be followed by death in two or three days. Or, in another class, a man in perfect health may suddenly loose the faculty of speech, and not be aware of it until he attempts to talk. Again, the only symptom may be a slight paralysis of the hand and arm. The mental phenomena in any of these cases may vary from a temporary derangement of the mind to a profound coma.

Other symptoms may follow the first attack. The patient does not recover, but after three or four days he is still found to remain paralyzed and aphasic. He may continue thus, or with slight improvement, for weeks or months, and then a second attack may occur, by reason of the detachment of another clot from the heart; and in this or subsequent attacks the shock and mental disturbance will be so great, as to cause a coma which will become constantly deeper, until terminated by death. If the embolus be quite small, only slight symptoms may follow, from which the patient will in time recover.

When the physician is first summoned to a case presenting any of the above conditions, his first duty is to inquire into any of the antecedent circumstances and history of the patient. For, in the first stage, it is sometimes very difficult to distinguish this from cerebral hemorrhage. But the clinical history will decide this point. If there have been previous attacks of rheumatism or heart disease, this should arouse suspicions of embolism.

The connection between rheumatism and cerebral embolism is this: Rheumatism is a disease which tends to affect the fibrous tissues of the body. The internal lining membrane of the heart is one of these. When this becomes affected its surface roughens, and then the fibrin becomes detached from the blood as it passes through the heart, and small clots are thus formed on the walls, chordæ tendineæ, or valves. The fibrin is here separated from the blood, in the same way as it is done outside of the body when it is whipped with wisps of a broom. The heart clots thus formed may vary in size from that of a mustard seed to that of a large pea. If one of these from any cause becomes detached, it passes along in the circulation, and may finally be stopped in some small artery of the brain, and there form an embolus, which will give rise to any of the symptoms already described.

A patient first seen in one of these attacks presents a striking condition, and one about which little was known until within the last twenty years; and even now, the profession appears to know but little about it. These attacks were often called apoplexy, and whenever there was paralysis due to cerebral disease, but with no loss of consciousness, it was called a paralytic stroke. Nothing of the relation of these cases to rheumatism and heart disease was then known. But even now it is sometimes quite impossible to diagnose this from cerebral hemorrhage; for a man may have an embolus without a previous history of rheumatism or heart disease; and again, he may have such a history and still have an apoplexy, and not an embolism. But though the character of the disease cannot certainly be determined in the first stage, yet as it advances other elements appear which will settle the diagnosis. If it is cerebral hemorrhage, there will soon be developed contractions in the paralyzed muscles, especially in the hand and arm. The hand will be turned inward, and the forearm semiflexed on the arm, and held across the chest as if supported in a sling; and the legs will become stiffened and have a peculiar swing in walking. In these cases also, the paralysis is usually confined to the right side, and is accompanied by unconsciousness at the onset of the attack.

The remote cause of the disease is generally rheumatism, but the exciting causes are various. It may be rage as in the present case. An embolus might not become detached for many years, if there was no exciting cause. Anything that increases the force of the blood current, or excites the heart, may bring on an attack. Such as a blow on the chest from a fist, or any strong muscular exertion, such as wrestling, lifting heavy weights straining at stool, or the efforts of child-birth, and even the act of stooping down, as in lacing a shoe, However, any of these same causes may also excite cerebral hemorrhage, because they increase the blood tension in the vessels of the head, and so lead to their rupture.

We now come to the rationale of this condition.

It will be noticed that paralysis, if present, is almost invariably on the right side only, and that it is accompanied by aphasia. The location of the lesion is therefore, in the left hemisphere of the brain. This is easily explained when we consider the arrangement of the arteries, as they are given off from the arch of the aorta.

It will be seen by this diagram, that as the current of the blood passes out of the heart, carrying with it a detached clot, it rushes by the coronary arteries, which are now closed by the auricular valves, and the embolus is driven along the upper curve of the aorta, and passes by the innominate artery, the opening of which is in such a direction, as not to be likely to stop and draw in the clot. When, however, it reaches the left common carotid, which opens into the aorta at nearly a right angle, the current tends to rush directly into this, and the clot is stopped before it can get by, and is drawn in. It now tends to follow the most direct course, and so passes by the external carotid, which leaves the bifurcation of the common carotid at a slight angle, and flowing up the internal carotid, it goes as far as possible without obstructing a vessel. If the clot is very large it may plug the common carotid, but if not, its most direct and natural course is toward the middle cerebral artery. Here it may be stopped at the junction of the two arteries, or it may pass on into the middle cerebral, or if not too large, into one of its smaller branches, and there form an embolus. The severity of the symptoms following will depend principally upon the size of the vessel which becomes thus plugged. The blood is in this way shut off from that part of the brain which is supplied by the obstructed artery, and its tissues become softened and degenerated, and breaks down, and is destroyed. This is the commonest cause of softening of the brain. If only a very small vessel is plugged, loss of speech may be the only symptom.

Thus Trousseau mentions the case of his colleague, who was reading, and when he for some reason attempted to call his servant, he unexpectedly found that he could not speak a word. But it rarely occurs that there are not other symptoms besides aphasia. However, if speech alone is lost, the seat of the obstruction and the part of the brain involved can be determined quite definitely. The location of the faculty which controls the faculty of speech is now known with considerable certainty. It was formerly supposed to be situated in the posterior part of the third frontal convolution, but recent investigations tend to show that it also includes the island of Reil, and probably the anterior part of the temporal lobe. It is almost universally located in the left hemisphere of the brain. There seems to be in most individuals a predilection to use the right hand principally, and this preference appears to be inborn. But aphasia due to a lesion on the right side of the brain, is proportionately about as frequent as to find left handed people. This indicates that the left hemisphere is exercised more constantly than the right. Accordingly, we find the left side of the brain larger, and better supplied with blood, and developed earlier in life, and having the advantage generally over the right. This increased nutrition of the left hemisphere predisposes to a more constant use of the muscles of the right side of the body. But in men who use the left hand in preference to the right, the right side of the brain is found to be the better developed. So if a left-handed man should have an embolus in the right middle cerebral artery, he would still be aphasic, because the centre of speech in him would be located on the right side.

The patient here to-day has aphasia, with only slight paralysis of the right hand. The mildness of the symptoms shows that he has only a small embolus probably, which plugs the arterial branch going to the speech tract on the left side. There are two varieties of aphasia. In one, the amnesic, the patient loses the memory of words, and consequently cannot express himself, though he may know what he wants to say. In the other, or ataxic variety, he knows what words he wishes to use, but cannot pronounce them, because of his inability to coordinate the movements of his tongue; and the result of his efforts is a confused mixture of unintelligible and disconnected words.

There has been much discussion as to the way in which improvement, or recovery of speech, takes place in these cases. It is probably by one of two means. Either the collateral circulation is restored, by means of anastomosing capillaries, or some other part of the brain assumes the functions of the diseased portion. Some observers deny the possibility of there being any collateral circulation, for they say the arteries of the brain do not anastomose, except by the circle of Willis. But for us clinical experience should be more of a guide than speculations. We know that patients do slowly recover their speech; and if there is no nutrition of the part of the brain where the speech centre is located, there will be death of the tissue of this part, and consequently no speech. There is no good authority for believing that there can be a vicarious action of one part of the brain for another; yet many believe this to be the solution of the difficulty. The truth is, probably, that the part is nourished by a collateral circulation. This is probably the cause of the improvement in the patient before us. There is a theory that the embolus undergoes fatty degeneration and finally becomes absorbed, and thus the obstruction in the circulation is removed, and the diseased portion becomes revitalized. This is possible, but doubtful.

Treatment.—All patients of this class, if they re-

cover from the first attack, and do not die from coma, should be treated as this man is now being. The indication is, to improve the nutrition of the brain. There are some things which are thought to do this. Blisters are sometimes applied to the head, but this is absurd. Blistering cannot open a plugged vessel, and thus restore the circulation. Yet not long ago a patient in this condition was seen by me, and the attending physician had administered large doses of iodide of potassium, and applied blisters to the head; but neither of these means are of any use. They may draw the blood to that portion of the head until it meets the obstruction, but it must be remembered that the anæmia is beyond the clot, and in front of it there is already congestion, which is thus being increased and so doing more harm than good. The one great and grand thing to do when the patient is seen in the first stage of the attack is, to *let him alone.* Merely keep the head slightly elevated and cool, and there stop. Later on, after the active symptoms of irritation, such as muscular twitchings and convulsions, and the general prostration, have passed off, then the head should be kept warm, at an equable temperature, but not hot, so as to facilitate the flow of blood to the part. Otherwise simply carry out whatever indications may arise, such as drawing off the water, if the bladder is paralyzed, or administering a cathartic, if there is obstinate constipation. The diet should be nourishing and simple, and the habits regular. But if the strength continues to fail, and there appear symptoms of heart weakness, the question as to whether stimulants should be given then arises. When such a crisis comes there is only one thing to do. Alcoholic stimulants must be administered carefully, in small and repeated doses, and the effect closely watched. So the patient should be tided over the dangerous period, until the vessels can recover their normal relations. But after all active symptoms have disappeared, something should be done in the way of trying to improve the nutrition and power of the brain. Strychnia and phosphorus seem to have such an influence. One-tenth of a grain of phosphate of zinc and one-third of a grain of nux vomica may be given at a dose. The following is the usual formula:—

℞ Zinci phosphatis,.....gr. iij
Ext. nuncis vomicæ,.....gr. x.
Fiat pillulæ xxx.

Sig.—One pill three times a day.

This has been the treatment of the present patient for the past two weeks, and as he seems to be improving it will be continued.

In cases where there is still some paralysis, galvanism, or electricity in some other form, should be applied to the affected muscles, and at the same time they should be exercised by passive motions, rubbing hot applications, and so forth. If, in the first stage, the patient feels chilly, or cold, from the shock, the temperature of the body may be kept up by hot applications or other means

Much may be effected in trying to reteach these patients to talk, by repeating to them often those nouns and names which they seem especially to have forgotten. They usually forget the names of persons, and of the commonest things, as this patient illustrates. When a watch is shown him he calls it a "ring post," a "boot," and "newsboys." A pencil he calls a "capie." A hat is "John," and so on. Now if you try to make these people talk, by patiently teaching them to use the commonest words, mostly names of things in a short time they will be found to have a vocabulary which will be very serviceable to them. An example of this fact is that of a lady patient of mine, who when I first saw her could only repeat over and over one single phrase, but after six months of education, she could use correctly three or four hundred words. This is quite a gain, when we consider that most of us, in our ordinary conversation, probably make use of only about one thousand different words in a year. This man should be taught in this way, for some time each day, and he will probably continue to improve in his talking, as he has done within the past two weeks.

Notes on Case 3.—The review of this case suggests the thought: How is it, that the faculty of speech is sometimes restored after aphasia has once existed? In answering this, the question arises, as to whether the so called speech centre is really the source from which impulses are carried directly to the organs of speech, or whether the true course is not in the corpus striatum beneath, to which impulses are transmitted from the cortex. Experiments seem to point rather to this latter being the true condition. The gray matter of the cortex is then thought to have rather an intellectual function, and merely originates ideas, and then stimulates the special centre beneath to carry them out. Now, if this be the case, we must search here in the corpus striatum for the source of both amnesic and ataxic aphasia, which occur when the speech area is injured or destroyed.

If the gray substance of the convolutions in the speech region is the source of the intellectual ideas relating to the memory of words, it is evident that obliteration of this portion will be followed by forgetfulness of what words to use in order to express ideas which may have originated in some other portion of the cortex. So we find the amnesic patients have ideas about things which they cannot remember words to express.

But when we come to explain the cause of ataxic aphasia unaccompanied by the amnesic variety, we must bring in another element, the existence of which, experiments have apparently demonstrated namely, that there appear to be so-called sensory areas in the brain, which, if affected, interfere with

or modify impressions which are normally transmitted to the brain by the sensory nerves, or which originate in the mind itself. Thus there appear to be visual, auditory, tactile, and other sensory areas or centres. And if the visual centre, for instance, were destroyed, though impressions would still be carried through the uninjured optic nerve, yet there would be no consciousness of a perception in the intellectual portion of the brain.

In a similar way the inability of the perceptive portion of the cerebrum to determine in what condition of contraction or relaxation any of the muscles of the body are without the aid of other senses, will account for the lack of coordinating power over these muscles when the tactile centres are involved in the disease. So in the ataxic aphasia, the inability to control the movements of the tongue may be due to partial or complete paralysis, and hence blunting of the sensibility of the tactile nerve centre of the brain which receives impressions from the muscular fibres of the tongue ; and this prevents the patient from knowing in just what condition of contraction the muscles of the tongue are at any given moment. So that if he starts to speak and puts his tongue into position to pronounce the first syllable of a word or sentence, when he wishes to change its position, so as to pronounce the second and following syllables, it moves about automatically, and is most likely to pronounce those words to which it has become most accustomed. This action is similar to that seen in the walk of a drunken man or one afflicted with locomotor ataxia, who may not be able to coordinate the muscles of his legs, simply because the mucular sense, or tactile sensibility of his legs and feet, is blunted, so that he does not know, from the impression made upon the terminal nerves, in what condition of contraction his muscles are. And if he attempts to walk without the aid of his eyes to help him determine the position of his limbs, he will stagger about and put his legs into as indefinite and peculiar positions as the man with ataxic aphasia will his tongue in pronouncing unmeaning and disconnected syllables.

So we conclude, that where there is ataxic aphasia the destruction of brain tissue from disease has involved the tactile area for the tongue, which is probably located in some portion of the speech area. It is thus easy to see how both forms of aphasia may be present simultaneously, if the disease be so extensive as to involve the whole of the region of speech.

We are now prepared to consider how it is possible for speech to be partially and gradually restored in these cases. There can be found objections to every hypothesis heretofore advanced to account for this. It seems, however, that the following explanation has something at least, to recommend it.

We have seen that the lesion is generally on the left side only of the brain, while the other side is still intact. Now because we have found that the "centre of Broca" on the left side is principally concerned in speaking, it does not follow that the same centre on the right side has not also been partially educated to assist the left, any more than the education of the motor area for the right hand and arm has been carried on to the total neglect of the corresponding area of the opposite side. And we know that when a man has lost the use of his right hand and arm, from paralysis or other cause, he can educate the left hand, so that it may ultimately become as skillful as the right. So it appears at least possible that the partially educated speech area on the right side of the cerebrum may gradually be educated to assume the functions hitherto performed by the left side. The fact that after a paralytic shock causing aphasia the patient still has an awkward and blundering use of words, though the left speech centre may be utterly destroyed, seems to point to the probability that the right side is attempting to perform the duties of the left, to which it is as yet unaccustomed. And just as a child may be slowly educated to talk, so these patients, by faithful teaching, will gradually regain the use of language.

An objection to supposing that the left area is gradually restored by a collateral circulation, and thus at last reassumes its accustomed function, is the fact that when an embolus or thrombus forms in an artery there is a stasis of blood throughout the whole neighbourhood of that artery, in the vessels supplied by it. And this stasis causes the coagulation of the blood and the extension of the clot throughout all these branches. Thus the arterioles become clogged, and they finally degenerate into mere cords, just as is the case where a ligature is tied round a small artery. Now these impervious cords can never again allow blood to circulate through them, and so it is difficult to conceive how there can be any collateral circulation where there is no means for the blood to pass into the diseased part. Furthermore, this view seems to be strengthened by the fact that, on post-mortem examination, the brain substance of this part is found to be softened, broken down, and frequently destroyed completely.

For these reasons, it seems more probable that the speech centre on the right side assumes the duties heretofore performed by the left. So it follows that efforts at education may be made with hopes of gradually restoring the lost faculty.—*Med. and Surg. Reporter.*

Mr. Erasmus Wilson, President of the Royal College of Surgeons, Eng., has received the honor of knighthood, in consideration of his numerous gifts to charities, etc.]

DR. FERRIER'S LOCALISATIONS.

In 1870, Fritsch and Hitzig published an experimental research on the brain, showing that the cerebral substance was not, as had been hitherto thought, unsusceptible of excitation; and they demonstrated, among other things, that electrical stimulation of the anterior parts of the brain produced movements on the opposite side of the body. Professor Ferrier laboriously and ably continued and extended these researches, and succeeded in ascertaining in a very exact manner that, in certain animals—dogs, cats, and monkeys—the excitation of certain definite and limited areas of the external cortical layers of the brain invariably produce certain definite movements on the opposite side of the body. In his earlier experiments performed on dogs, cats, and rabbits, (published in the *West Riding Lunatic Asylum Report* of 1873), he ascertained that the anterior lobes of the cerebral hemispheres are the chief centres of voluntary motion and active outward manifestations of intelligence; he defined and localised the centres for the movements of the eyelids, face, mouth, tongue, ear, neck, hand, foot, and tail; and showed that, in general, the action of the hemispheres is crossed, but that certain movements of the mouth, tongue and neck, are bilaterally co-ordinated for each cerebral hemisphere; that the corpora striata have crossed action, and are centres for the muscles of the opposite side of the body; that the optic thalami, fornix, hippocampus major, and surrounding convolutions, have no motor significance, and are probably connected with sensation; that the optic lobes or corpora quadrigemina, besides being concerned with vision and the movements of the iris, are centres for the extensor muscles of the head, trunk, and legs; and that the cerebellum is the co ordinating centre for the muscles of the eyeball; and on the integrity of these centres depends the maintenance of the equilibrium of the body.

It would be difficult to overestimate the value and importance of these discoveries; but, when they were followed and confirmed, a little later, by similar researches on the brain of monkeys, the localisation of function in the human brain—having been deduced from the study of the homologous parts of the brain of the lower vertebrates, and the almost identical brain of the monkey—was removed from the region of probabilities to that of scientific facts. These researches, coupled with an immense amount of pathological data collected by Charcot, Pitres, Hughlings Jackson, and many others in all countries, have culminated in the establishment of a cerebral topography of localisation of function, which, though still disputed, and however much they may be modified by other researches, such as those of Goltz and Munk, must enter largely into the new physiology and pathology of the brain.

Briefly considered, the defined areas of cerebral localisation discovered and mapped out by Ferrier are as follows:—Most of the voluntary motor centres are grouped round the deep vertical fissure of Rolando, which passes from the summit of the hemisphere above to the horizontal fissure of Sylvius below; the convolution anterior to this fissure, the ascending frontal, contains, in its upper part, the centres for the complex movements of the arm and hand, and, in its lower part, the centre for the movement of the lips; the posterior half of the superior and middle frontal convolution is a centre for lateral movements of the head and eyes, with elevation of the eyelids and dilatation of the pupil; in the upper part of the convolution, which is behind the fissure of Rolando, the ascending parietal convolution, is the centre for voluntary movement of the lower limb, and lower down are centres for the movements of the hand and wrist; the posterior extremity of the third left frontal convolution is, as had been previously established by Broca, the centre of speech, and, as further demonstrated by Ferrier, the motor centre of articulation. Behind the ascending parietal convolution, in a spot called the supramarginal lobule, are the centres of vision; still more posterior is the centre of hearing; the centre of smell is located in the uncinate gyrus; near it is the centre of taste; and touch is located in the hippocampal region. Ferrier showed, moreover, that the optic lobes, or corpora quadrigemina, are not only closely connected with the function of sight, but are also the centres of equilibriation and of certain emotional expressions; and that the cerebellum, while mainly concerned in the preservation of equilibrium, is also a centre for associated movements of the eye, and of various muscular adjustments which aid in maintaining the equilibrium of the body.

These are, briefly stated, the main results of Professor Ferrier's researches; and to the physiologist and physician they are, by mapping out the brain, as invaluable as a chart of an unknown region would be to an explorer.

It was not long before physicians and surgeons began to take advantage of these new data. They found in them an explanation of many of the pathological experiments practised by that arch-vivisector Nature; and discovered that some of the diseases of the brain hitherto considered incurable, were susceptible of amelioration, or even of cure. We will mention a few examples of the recent application of cerebral localisation to medicine, among a great number. A child (*Fall von Hirnabscess bei Courvoisier Correspondenzbl. schweiz. Aerzte*, No. 1, January 1st, 1879,) two and a half years old, had a slight fall on the left side of her head, to which, however, no importance was attached; a week later, the child was seized with vomiting, pain in the head, and paralysis of the right leg and arm, followed by ptosis and strabis-

mus; the next day there was complete right hemiplegia, with left facial paralysis and loss of consciousness. The paralysis pointing, according to Dr. Ferrier's localisation of functions of the brain, to injury or disease of a certain definite spot; the skull at this spot was, therefore, laid bare, and a depressed fracture was discovered. The piece of depressed bone was removed, giving exit to a quantity of pus; a consciousness and power of movement of the paralysed limbs returned a few hours after the operation, and the child eventually recovered. A man who had been struck on the left side of the head with a stone immediately became unconscious; and, on recovering consciousness, was found to have become completely speechless, or aphasic, without paralysis. Some time later, he came under the care of Dr. Hammond, of New York, (*Diseases of the Nervous System*, seventh edition, p. 209), who diagnosed from the symptoms fracture of the internal table of the skull and pressure on the posterior part of the third frontal convolution. The spot thus indicated by the localisation of the lost function of speech was trephined by Professor Sayer, and, as diagnosed, the internal table of the skull was found to be fractured and a splinter pressing on the convolution named. The fragment was removed; and as soon as the patient recovered from the ether, he spoke perfectly well. We will give but one case from a great number, of traumatic epilepsy. A child, aged 7, received a blow from a poker; it produced no external wound, and no scar or depression of bone remained. A year later, the child had an epileptic fit, and continued to have fits daily for about seven years, with occasional periods of exacerbation, at which time the fits increased to twenty or thirty a day. At the end of this time Dr. Ferrier was asked to see the child in consultation; tenderness was found over the right parietal region, with loss of power in the left hand, and indistinct utterance from loss of muscular power in the lips. Trephining was decided upon, and Dr. Ferrier pointed out that the seat for trephining should be rather low down, to correspond to the centres in the brain for the arm and lips, which seemed affected. This was done; for eight weeks after the operation, the child was free from fits, and though at the periodical exacerbations the fits returned, yet with always diminishing severity, (*British Medical Journal*, October 16th, 1880). These cases might be multiplied greatly. In the *Glasgow Medical Journal*, (September, 1879,) is reported a case of right hemiplegia and convulsions, due to tumor of the dura mater pressing on the motor centres of the left brain, diagnosed by aid of cerebral localisation, and cured by removal of the tumor. In *Brain*, (October, 1881,) in a case of left hemiplegia, due to abscess of the brain, the situation of which was indicated by knowledge of the motor centres of the paralysed limbs; the skull was trephined, and the abscess opened and emptied, the patient ultimately recovering. Dr. Echeverria has collected 165 cases of traumatic epilepsy, of which 64 per cent. were cured by trephining, the site for the operation and the exact nature of the lesion being indicated by cerebral localisation.

But, apart from these cases of direct surgical interference, which, but for a just confidence which a knowledge of cerebral localisation gives, would be left to live or die equally miserably, the influence of exact knowledge of the brain is felt in the treatment of mental and nervous diseases. Time was, and not long ago, when insanity was looked upon by the physician, as it is now by the vulgar, not a disease of the brain-tissue, often capable of cure, but as an incomprehensible affliction of the impalpable mind, before which the physician and surgeon are therapeutically powerless. Thanks, however, to scientific research, brain-tissue has been found to be not only as capable of regeneration as many of the other structures of the body, but even more so; and stimulation, electrical and therapeutical, of degenerated centres of localised function may, and in fact often does, lead to recovery. In an interesting paper by Dr. Althaus, in *Brain*, (April, 1881), cases are given of the application of the constant current, with very happy results, to those parts of the brain which, from the symptoms considered in connection with cerebral localisation, were known to have undergone morbid change. This comparatively untrodden path opens a new vista of the cure of nervous diseases.

In therapeutical researches, also, the effort at the present day is to discover and define the localised action of drugs; and in this direction also the study of cerebral localisation opens out to us a fair prospect of being able to treat various forms of insanity and acute nervous diseases, due to local causes, on a rational basis. Dr. Ferrier's recent research on the localisations of atrophic paralysis —showing how atrophy of certain groups of muscles which are associated in action is due to localised lesions in the spinal cord—point the way to fresh improvement in the treatment of such lesions.

Indeed, the outcome of the minute and faithful study of the functions of the brain cannot be estimated, so great are the already achieved, and so much greater the probable benefits; so vast the importance of knowing the working of the great organ of the mind and centre of the movements and sensations of the body.—*British Medical Journal.*

M BERGER advocates a method in skin-grafting, of exciting the vascularization of the flap before cutting it, by covering the skin either with a mustard plaster or with warm poultices. He has already found this method to be successful.—*Brit. Med. Jour.*

RUPTURE OF THE PERINÆUM AND PROLAPSUS UTERI—THOMAS.

Ann R., aged forty years and a native of Ireland. She has had one child (six years ago) but no miscarriages, and is now a widow.

How long have you been complaining? "For about a year." How do you suffer? "From a great pain in my back." What else? "Pains in my knees, legs, and shoulders." Do you suffer much at your monthly periods? "No." Can you walk about pretty well? "Yes." Can you go up and down stairs well? "No." Can you do as much work as before you began to feel badly? "Oh, no." Have you any trouble about your bladder? "I have to pass my water too often." How many times during the night? "Only once or twice at night, but I have to pass it very often indeed through the day." You feel relieved in this respect, then, at night? "Yes." Do you have the whites? "Yes."

You observe that the patient has a very strong frame, such as we commonly associate with persons in robust health; but it needs only a glance to see that she looks harassed and depressed. As you have heard, she was well up to one year ago, when she began to suffer from great weakness and pain in the back and thighs. Then followed leucorrhœa and irritability. Such symptoms scarcely seem like those that could seriously affect a patient apparently so strong, and she herself does not make very much of them; but yet the fact remains that she cannot do her ordinary work any more.

Now let me show you what took place in this woman's case six years ago, and has really caused all her trouble, although she has been complaining only for the past year. Before the birth of her child her uterus was kept up in place by the ordinary means provided by nature for the support of this organ; but at the time of the delivery the parineal body was split directly in two, the rupture of the parts extending completely back to the anus. What was the result of this accident? Presently the bladder began to fall, because the laceration of the perinæum took away its entire support; and as it descended lower and lower, the uterus(which was in a state of subinvolution and greatly enlarged) came down with it. The patient's system bore up nobly under such a strain; but at last, at the end of five long years, it began to give out. The uterus has not as yet come down outside of the body in this case, but it has fallen down to the vulva; so that the fundus thus presses upon the bladder, while the rectum, on the other hand, is dragged upon.

Next we enquire, Can the symptoms, of which the patient complains, be satisfactorily explained by such a prolapsus uteri as we find here? and the answer is, "Undoubtedly they may." This is in some respects a prolapsus of the second degree, because, for some reason, the uterus still retains its normal axis, instead of having become retroverted, as is generally the case. I presume that if nothing were done to prevent it the organ would, before a great while, come down entirely outside of the body; the ligaments having finally given up all resistance.

I wish to pause here for a moment to say, that any medical man who is in the habit of practicing obstetrics and ignores such an accident as rupture of the perinæum had better, by all means, give up this branch of the profession. All sorts of uterine troubles are constantly arising from it; and the most lamentable part of the matter is that they might all have been avoided if the accoucheur in attendance in each case had only performed his duty properly. Of course, rupture of the perinæum is sometimes inevitable, in spite of all our efforts to save it; but not infrequently the accident can be prevented by a little care. For instance, when forceps are employed it is better to take them off before the head is delivered. If by taking every precaution, then, we can prevent the perinæum from giving way, we are doing a vast deal for the patient's present safety, as well as for her future welfare. There are some who boast that they do not even tear the fourchette in delivering their patient; but as a fact it is found that this almost invariably gives way. Such a rupture, however, is physiological, rather than pathological, and it is not of this that I am speaking. More extensive lacerations of the perinæum are, unfortunately, very frequent, and, indeed, they take place in the great majority of instrumental labors. Of course, I do not mean that in the generality of forceps cases the perinæum is torn all the way through to the anus; but enough injury is done to give rise to very serious trouble. When we consider what an acrid and irritating fluid the lochial discharge is, it certainly appears marvellous that more parturient women do not die of septicæmia, because when there is a rupture of the perinæum, the raw surfaces are constantly bathed by this irritating material pouring from the uterus. Yet this is only one of the many evils that result from this accident.

Now suppose that, in some case, in spite of all efforts to prevent it, you find that there has been a rupture of the perinæum. The question at once presents itself, Shall I close it or shall I let it alone? While it is impossible to lay down any law that shall be universally applicable in such cases, the rule is, put in sutures immediately and repair, as far as it is possible, the damage that has been done. To this, however, there are some exceptions. When, for instance the patient has lost a large quantity of blood, or has otherwise become much exhausted during labor, or when there are weak-minded relatives present who will cry out with horror at the mere thought of such a proced-

ure, and nearly frighten the patient to death, it is better to delay the operation until a more appropriate time. If the patient has been bleeding very profusely, she may actually die while the sutures are being put in, and, of course, any obstetrician who attempts to operate under such circumstances must be regarded as culpable.

If done carefully and thoroughly the immediate operation is generally successful. Usually, however, the practitioner does not have the necessary appliances for operating with him, but it should be the rule of every one who practices obstetrics at all to always have the things required at hand in every case which he attends. When this is the fact he can put in the sutures without any delay, and if anæsthetics have been previously used during the labor, the patient very often is entirely unaware that any operation is being performed upon her. When a laceration has thus been promptly repaired you have closed up two avenues of future trouble to your patient. In the first place, you have prevented the exposure of the raw surfaces of the torn perinæum to the septic action of the lochial discharge, to which allusion has already been made. I often wonder why it is that all women do not die of puerperal fever after labor. As the patient lies on her back the septic fluid bathes not only the cervix (which is very likely to have been lacerated) and the vagina, but also pours directly over the fourchette whose lymphatics and blood-vessels have been exposed by its almost inevitable rupture. All this is going on for days and days together, and although vaginal injections may be of service, they cannot prevent it. How much greater must be the danger, then, when not only the fourchette, but perhaps nearly the whole perinæum, is torn through, and the extensive surfaces of its two parts left exposed. In the second place, by an early operation the necessary support is furnished to the uterus, and the danger of prolapsus in the future is averted. During the present course I have not had so good an opportunity as the present for speaking of this subject, which I regard as a very important one.

But now, as to the patient before us. Can she be cured? I think she can, but it will take a long time. Under the circumstances here present I would by no means advise that the treatment should be begun with a surgical operation. It is possible to restore this uterus to position and maintain it there by other means, and this will relieve both the engorgement which now characterizes it and the severe dragging upon the ligament which has been going on so long. For the purpose I would suggest Cutler's pessary or some modification of it (which might be removed at night), and in addition copious vaginal injections of hot water should be frequently used, while care should be taken that all pressure from tight clothing be removed. After three months of such treatment as this I do not doubt that we should have a uterus much less hyperæmic and heavy than at present, and it would then be proper to restore the lacerated perinæum by an operation. The restoration of the perineal body would thus support the bladder, and all traction having been removed the uterus would probably remain in its normal position without the aid of a pessary or other mechanical contrivance.

SUPPURATION OF THE KNEE-JOINT, ASSOCIATED WITH PHTHISIS. AMPUTATION; RECOVERY, WITH DISAPPEARANCE OF CHEST SYMPTOMS.*

Charles W——, aged twenty-three, a footman, was admitted on May 12th, 1881, into Job ward under Mr. Bryant's care. In February, 1878, he jumped from a loft about ten feet, and at the time felt no ill effects. About ten days afterwards he became feverish and very weak; he perspired a good deal, and had a bad cough. For three months he kept his bed In August he went into Canterbury Hospital, where he was told he had rheumatism in his knee. His legs were dressed with a spirit lotion, and in a fortnight he was discharged. For three months he was in good health; the swelling had entirely disappeared from his knee, which he was able to bend. His knee, however, soon began to swell again, and became hot and painful. In July, 1879, he was admitted into Guy's, when his knee was swollen and felt pulpy to the hand. It measured 14.25 against right 12·75. There was no fluctuation, but pain on pressure over the femoral condyles. There was then dulness at the base of the left lung. The knee was blistered and a posterior splint was applied. He was discharged August 27th, wearing a Bavarian splint to ensure immobility of the joint, and with an elastic bandage beneath it for purposes of pressure. He wore his splint for two months, when his knee being much better he discontinued it. He was then able to bear his weight on his leg and bend the knee, and so resumed work.

Six weeks ago he jarred his knee when coming down stairs. The accident caused him much pain and the joint in about two hours after swelled a good deal. He could, however, use the limb. The joint has since steadily grown worse. He has had hæmoptysis for the last three years, and a bad cough in winter. He perspires much at night.

On admission, May 12th, 1881, the knee was much swollen and displaced backwards, the tissues around being very œdematous. The joint was clearly disorganized. The man looked very ill and thin, and had a bad cough. There was dulness over both apices in front, and "cogged" inspiration

* Read before the Medical Society of London, Oct. 24, '81.

at both apices, but it was most marked on the left side. There was prolonged expiration and bronchial breathing at the left apex. Good resonance and vesicular murmur at the bases. He had had a good deal of hæmoptysis, and his expectorations were muco-purulent.

June 7th.—Under chloroform his leg was amputated; an Esmarch bandage having been applied as a tourniquet after elevating the limb, antero-posterior flaps were made. The anterior one was made by a semilunar incision reaching to about two inches below the condyles. The posterior flap was made by transfixion. The bone was sawn through above the condyles. All the vessels were twisted, except one large vein, which was ligatured with carbolized gut. Great care was taken to stop all oozing, by the use of sponges wrung out with hot iodine water, that quick union might ensue. The flaps were brought together by silk sutures, one inch apart, strapping being applied in the intervals. The stump was washed with iodine water, and a drainage-tube put in. The wound was dressed with terebene and oil, and a stump put upon a posterior splint. The knee, on examination, was in an advanced state of pulpy disease. The joint was full of caseating pulpy material. The cartilage was removed from the external condyles, and the bone was covered with granulations. The opposing surface of the tibia was in a less advanced condition. The underlying bone was healthy. In places sinuses had begun to form. On the 13th, the sixth day after the operation, the stump was dressed for the first time, when union of nearly the whole length of the wound was found to have taken place. On the 14th, the patient was doing well. There was very little discharge from the stump. Temperature, 99.6°; pulse, 100. On the 17th, secretion had diminished in quantity. On the 21st, the fourteenth day after the operation, the drainage-tube was removed. Temperature 101.2°, probably due to constipation. On the 23rd there was only a granulating surface of about a quarter of an inch at the inner extremity of the wound. Union had taken place in the rest of its extent. Temperature 99°.—Chest examined: Right apex much improved since his admission. Good resonance over the right apex, and fair over the left, the only fault being a slight prolongation of the respiratory murmurs. Left side inspiration still cogged. Respiration still somewhat bronchial. At bases good vesicular murmur.

On July 14th the patient was discharged convalescent, and looking comparatively well. He had then no night sweats, and did not spit blood. The stump had healed well, except at the inner extremity of the line of union of the flaps, where there was a very small granulating surface.

Remarks.—I have thought this case worthy of being brought before the notice of this Society on account of the important practical point it illustrates—namely, the value of removing local suppurative disease, and more particularly bone or joint disease, when associated with lung mischief; and if it cannot be said in the case before us, from the want of lapse of time to enable us to form a positive judgment, that the organic disease which existed in the lungs at the time of the amputation had disappeared, there can be no doubt that it had become quiescent, and had apparently advanced towards cure; for when the man left the hospital all the local lung symptoms had ameliorated, and his general condition had greatly improved. It is to be noticed also that the wound after the amputation had almost entirely healed by quick or primary union. If I might venture to speak from my own personal observation, I am convinced that the presence of local suppurative joint and bone disease, if it does not primarily originate lung trouble, does much to aggravate it and hasten its progress; while the case I have brought before you, in addition to the experience gained by others which have passed under my care, clearly prove that by the removal of the local suppurative disease the lung mischief, which may have been previously progressive, is retarded, if not cured; the lung disease by its presence affording an argument in favour of operative action rather than of delay. Under these circumstances, it clearly becomes the duty of the surgeon to employ his art actively rather than expectantly, and to take away by no partial but by some decided operative measure any local suppurative disease which by its progress has been proved to be incurable by natural processes, or from its nature is likely to require much time for its repair. The case I have just read adds another to the list, which has been steadily lengthening, in which this practice has proved successful, and it will, I trust, encourage surgeons to carry out the line of practice it illustrates. In lardaceous visceral disease the same line of practice should also be employed.

ANIMAL LIGATURES.

The choice of a proper material for a ligature is a matter of serious import to the surgeon in the performance of plastic and other operations. It is well known what stress Marion Sims laid upon the value of the silver wire suture as affecting the success of the operation for the cure of vesico-vaginal fistulæ. Various metal wires have been used, yet still the silver wire is considered as the most generally serviceable of all the metal sutures. But there are many cases in which metal sutures of any sort are inconvenient or inapplicable, and the attention of surgeons has long been turned to the search for a material for sutures that should better meet the indications than does silk, which

has been used probably more than any other material.

Of late, special attention has been paid to the matter of discovering animal ligatures which should be of sufficient strength and endurance to serve the purpose of ligating an artery, without danger of premature absortion allowing of secondary hemorrhage, and which should yet be absorbed after serving their purpose so as not to be a source of irritation.

Carbolized gut was proposed some years ago and has been used with more or less favourable results by a number of surgeons. The great objection to this ligature has been that it would take up considerable moisture from the vital tissues, soften, and become absorbed so soon that it could not be depended upon in circumstances which require that the ligature should remain firm for several days.

In the *Annals of Anatomy and Surgery*, of October, we note a paper by Wm. Macewell, M.D., of Glasgow, Scotland, in which, after discussing this subject at some length, he recommends as the result of his experiments, a preparation of gut by a prolonged immersion in a solution of chromic acid in water and glycerine. He found that by varying the proportions of chromic acid and glycerine, greater or less power of resisting absorption could be imparted to the gut. "By using a strong solution of chromic acid a gut was obtained which resisted the action of the living tissues for at least two months, and by a weak solution gut was prepared which softened in the tissues in a few days."

By a series of experiments he ascertained that to prepare a gut which will resist the action of the tissues for about two weeks and then soften and become absorbed, it should be kept for two months in a solution consisting of chromic acid, one part, water, five parts, glycerine, one hundred parts. It should then be washed and dried and placed in a solution of carbolic acid and glycerine 1-5. As the length of time taken to prepare the gut in this way is an inconvenience, he experimented farther, and has found that a gut can be prepared which will resist absorption almost as well as this by immersing it in a solution consisting of chromic acid, one part; water, five parts; and glycerine, twenty-five parts. If kept in this solution for four days, the gut will resist the action of the tissues for from five to eight days, and will answer for sutures in flaps or in plastic operations of various sorts.

Mr. Lister's method of preparing catgut ligatures, as given in his address before the Clinical Society of London, is as follows: He takes one part of chromic acid, 4,000 parts of distilled water and 200 parts of pure carbolic acid. Into this solution is placed catgut about equal in weight to the carbolic acid. At the end of forty-eight hours catgut steeped in such a solution is sufficiently prepared. It is then taken out of the solution, dried and placed in carbolic oil, one-to-five, it is then fit for use.

Dr. Macewen calls attention to the necessity of having a good article of the thoroughly dried old gut in order to make a good preparation. The result of quite an extended use of these ligatures during the last three or four years has shown to his entire satisfaction that they do not produce irritation in the tissues. The average length of time that they will maintain their hold in the tissues has already been stated in the directions for preparation of the ligatures.

Other animal substances have been used with success by different surgeons. An Australian surgeon has used and highly recommends ligatures made from the tendons of the kangaroo. He reports very favourable results obtained by their use, but we have not heard of these ligatures being introduced into general use, or in fact of their having been placed in the market at all, so as to be obtainable by the surgeons of this country. Our attention has been called, however, to a ligature manufactured from whale tendon, which is to be found now in the hands of our most reliable dealers in surgical instruments and appliances. This whale tendon ligature is imported from Japan, and is the invention of Dr. Ishiguro, the Chief Surgeon of the Imperial Japanese Army. In its preparation a whale's tendon is teased out until the fibres look very like those of hemp. Then the longest and finest fibres are selected and spun together as ordinary silk thread. According to the reports of the Japanese surgeons who have tested them, some of whom have been connected with the Japanese army in active service, have had excellent opportunity to test them, the results have been eminently satisfactory. One statement made by Dr. Ishiguro as to the readiness with which the whale tendon ligature is absorbed in the tissues, would be calculated to make us seek farther testimony before we should be willing to depend upon it in cases where there would be serious danger from secondary hemorrhage. If it is necessary to put the whale tendon ligature through a special course of hardening with chromic acid or other chemicals in order to prevent too early absorption, it is not probable that it will meet with any very general acceptance. We shall be very glad to have the experience of any who have tested these ligatures, or any other form of animal ligatures.

We observe in the *Medical Times and Gazettee* of April 2, 1881, in the report of a discussion before the Royal Medical and Chirurgical Society, Mr. Dent stated that he found these whale tendon ligatures to be too readily absorbed.

Another material which has been used with success is a flat ligature cut from the aorta of the ox. Mr. Barwell introduced this ligature, and commends it emphatically to the attention of the profession.—*St. Louis Courier of Medicine.*

LUPUS EXEDENS SUCCESSFULLY TREATED BY CREASOTE AND CALOMEL.

Dr. Clinton B. Herrick reports the following case in the *Medical Annals.*

P. S., aged 65, was admitted into the Albany Hospital (service of Dr. A. Van Derveer), October 21, 1880, with the following history. No trace of disease of ulcerative nature in family. About fifteen years previous, patient first noticed a small wart, about the size of the head of a pin, in front of left ear, which remained about the same for a period of five years. Then it began to get a little sore, and if scratched would bleed, a scab forming ing afterwards. He also noticed then that a small ulcer was progressing, which increased and spread downward, and then toward his eye, the ulcer healing and crusting over in its track. The character of the sore was, in form, irregular, without discharge, up to this time, and painless, being accompanied however with an intense itching sensation, so great sometimes that the patient could scarcely control himself. The disease advanced, surrounded the eye, implicated the lids, and crept on over the left side of the nose down to the alæ, and a portion on the right side. About three months before coming into hospital the ulcer began to discharge a thin, purulent matter, very profusely so as to require, at times, redressing every hour or less When admitted, the disease covered almost entirely the upper half of left side of face. At first creasote alone was applied, then the dischloracetic acid was used with some benefit. Then applications were made of creasote and calomel, and from the first use of it the ulcer began to improve. The method of using it was to take a camel's hair pencil, dip it first in the creasote, then in dry powder of calomel, applying it to the edges and where depressions existed, the brush with a twirling motion dislodging and removing the cells By this treatment, the surface glazed over with healthy skin, its size diminished, and at present there only remains a small portion of the disease over the eyelids, without any indications of its returning or spreading again.

Action of Pilocarpine in Croup after Tracheotomy.—In connection with recent cases which demonstrate the good results obtained in diphtheria by the employment of pilocarpine, I have the honor to communicate the report of a case which is a confirmation of it under a new form, and which contributes in my opinion, to settle briefly the mode of therapeutical action of the medicine.

On Monday, 4th July, I was called in consultation at Kerentrech by my friend Dr. Duliscouet to see young L., six years of age, affected with well marked croup. The situation was so grave that tracheotomy was deemed immediately necessary. We had at hand only one canula a little too large, but it would have taken too much time to have sent for another. Its introduction into the trachea was tedious and difficult: one moment we believed the patient dead. At length after a struggle of half an hour we had the happiness of calling him back to life.

Tuesday 5th—The night had been safely passed. The cleansing of the canula had been intelligently done by the parents. Temperature 39°. I had read the afternoon before the interesting remarks of Dr. Le Reboullet in the *Gazette Hebdomadaire* (May, 1881); I told my colleague of it.

The same evening the respiration having become harsh and embarrassed, M. Duliscouet injected under the skin of the neck 5 milligrammes of chlorhydrate of pilocarpine in a gramme of distilled water. Five minutes after, abundant salivation occurred: a spell of coughing expelled by the canula a quantity of mucus and false membrane. A perfect calm succeeded and continued during the night.

Wednesday 6th—The child appeared to be doing well. Temperature 38°.2; respiration easy. The little patient took his food without trouble; he was sitting up and playing in bed.

We nevertheless practiced morning and evening a subcutaneous injection of 5 milligrammes of pilocarpine. Every time after some minutes violent spells of coughing occurred with the expulsion of mucus and false membrane through the canula.

Thursday 7th—The night had been bad. The child was much troubled and restless; temperature 38°.5, respiration more wheezing and expectoration more difficult. M. Duliscouet however seeing no very bad symptom, abstained from making as on the preceding days, an injection of pilocarpine. At two in the afternoon the father came in haste for us. We found the child in a state of advanced asphyxia; the look fixed, face pale and livid, lips purple, extremities cold, etc.

Both canulæ were at once removed. We vainly attempted to extract with a pair of forceps a large piece of false membrane that had appeared in the trachea. The situation seemed desperate. An injection of pilocarpine was given by M. Duliscouet upon the front of the chest. The child was seized with a violent coughing spell and expelled through the tracheal wound a great many pieces of false membrane bathed in mucus. One piece larger than the rest presented the appearance of a bronchial tube and branches. The efforts of coughing lasted thus nearly half an hour, expelling every time pseudo-membranous debris. Gradually the face of the child became colored, showing great relief. At half-past three o'clock everything was doing well.

In the evening another injection of five milli-

grammes of pilocarpine was followed by the usual good effect.

Friday 8th—The child had slept perfectly. There was no fever. Expectoration was purely mucus, a little thick but very easy. A last injection was given as a precaution. In the afternoon the canula removed as a trial, was entirely removed in the evening. The next day and the following days the larynx became freed at the same time that the tracheal wound closed. From this time on the case proceded without interruption.

We are convinced (Dr. Duliscouet and myself) that tracheotomy alone would not have saved our little patient, and that the honor of the cure was due to the repeated injections of pilocarpine. It seemed to us from every evidence presented, that the beneficial action of pilocarpine is due to the bronchial hypersecretion that it induces and the expulsion of false membrane which obstructs the respiratory tract.—*Journal de Medicine et de Chirurgie.—Nashville Journal of Medicine.*

Peritoneal Surgery.—The New York *Medical Record* of October 22nd, gives an interesting report of a discussion on the recent progress of peritoneal surgery in the New York Academy of Medicine. The discussion was opened with a paper by Dr. Marion Sims. Dr. Sims reviewed the progress of peritoneal surgery, and specially directed his mind to this question: "Does it lead to a better treatment of gunshot and other wounds of the abdominal cavity?" Dr. Sims claimed for ovariotomy that it was the parent of peritoneal surgery, and that the governing principles of the one must govern all operations affecting the other. Dr. Sims arrived at the following conclusions:—1st. Wounds of the peritoneal cavity have a common course to run. 2nd. They have a common termination, and that is death by septicæmia. 3rd. That is the general law in death after ovariotomy. 4th. It is the general law in death after gunshot and other wounds of the abdominal cavity. 5th. Septicæmia is the result of absorption of bloody serum found in the peritoneal cavity after wounds or operation. 6th. Gunshot wounds of the pelvic cavity are recoved from because of the natural drainage afforded by the track of the ball. 7th. Patients with gunshot wounds of the abdomen die of septicæmia because there is no natural drainage, and the bloody serum falls into the peritoneal cavity, and is there absorbed. 8th. The effect of bloody fluid upon the abdominal cavity is such as to demand abdominal incision, the suturing of wounded intestines, the tying of bleeding vessels, the cleansing of the cavity, and the use of the drainage-tube or not, according to circumstances. 9th. If this operation be well done there is hardly any need of a drainage-tube. Dr. Sayre expressed practically the same views as Dr. Sims. One of the chief features of the discussion was a speech by Dr. James R. Wood. He allowed much, but "not all the glory," to gynæcologists for the advance in peritoneal surgery. He cautioned the Academy against too quickly reasoning from the case of ovariotomy to cases of abodominal wound. He was especially cogent when he showed the difficulty of diagnosing the seat or the nature of the injury in gunshot cases, saying "with reference to reaching into the cavity of the peritoneum in search for bullets, or injured parts, it is a very serious matter"; also in pointing out the difference between a patient about to undergo ovariotomy and one recently the subject of gunshot injury. The one was not in a state of shock, and was well prepared for the operation. The general surgeon has the state of shock to deal with in gunshot wounds of the peritoneum. Such a note of caution from a surgeon of Dr. Wood's boldness and experience will not be misconstrued. It is obviously premature to apply the facts of ovariotomy to gunshot and other wounds of the peritoneum.—*The Lancet.*

Management of Labour in the Vienna Lying-in-Hospital.—In *Le Medicin* for March 12, is given the following as the *modus operandi* in this Hospital. As soon as the head appears at the vulva, the woman is made to lie on her left side, her right leg being raised and held by an assistant. The accoucheur, standing on the right of the parturient woman, passes his left hand between the woman's thighs, carrying it forward and applying it against the ch ld's head, He supports the perineum with his right hand; but the resistance thus afforded must not be a passive one. He must on the contrary, during each labour pain press energetically over the sacro coccygeal region, and pull as much integument as he can over the child's head. Meanwhile, his left hand steadies the head at the vulva and prevents its coming out under the *influence of uterine contractions.* In the interval between the pains, the head goes back, soon to return again. The forced alternate motion which the head undergoes has for its result the gradual distension and a greater elasticity of the vulva. At last, the head comes out and extension takes place. One must carefully prevent this expulsion from taking place during a uterine contraction, and let the head come out when the pain is nearly over. The perineum must be supported to the end, for the passage of the shoulders is ordinarily more dangerous than that of the head itself.—*Le Medecin Practicien*, March 12.

A Malpractice suit in Belgium, brought against a physician for the alleged improper prescription of morphia, resulted in acquittal not only, but the plaintiff was adjudged to pay the defendant one thousand francs damages. It is reported that the action was instigated by a rival doctor.

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THE PAST YEAR.

Many events have transpired in the medical world during the past year which are well worth recounting, although with one notable exception, none may be said to have been pre-eminently noteworthy. Only those who have watched closely the tendency of the times and the progress of events, can form a correct estimate of the great advances which are being made all along the line. Medicine to-day holds a position of pre-eminence among the learned professions, never before attained in history, and its prospects are brightening and widening from year to year. Although, with the revolution of each year, there appears as in the movement of a carriage wheel, to have been but a change of position which brings us back to the same same point, yet, as in the wheel, there is a progressive advance equal to the length of its circumference; so it is in medicine. The advance to many may appear slow, and as it were, only in a circle, ever returning to the same point again; it is, nevertheless, a positive progressive advance.

The mental activity among the members of the profession in all parts of the world; the interchange of new lines of thought and ideas; the friendly and professional associations that are being formed; the increasing interest in science and truth, for its own sake; and the increasing amount and value of experimental research and investigation, are all contributing in no small degree to the rapid and lasting advancement of our noble profession.

The noble charity of our art is also seen in the philanthropic efforts of the profession for the amelioration of the sufferings of the race, so far as may be accomplished by attention to hygienic laws and measures of sanitary reform. The various governments of the country have been besought again and again by the profession, to initiate certain measures for the improvement of the condition of the people in sanitary matters, and their requests have been met with a spirit of enquiry by these governments who, we have no doubt, but for their utter want of knowledge of such subjects, would ere this have given effect to the required legislation. The way is rapidly opening up now, however, and sooner or later these much needed measures will be obtained.

The greatest event of the season so far as medical affairs are concerned, was undoubtedly the meeting of the International Medical Congress, held in London in August. Here were gathered together from all parts of the civilized world, the leading lights of the profession, seeking to lay at each other's feet, the results of their labours, in the advancement of science, and the pursuit of truth, and to learn wisdom from each other. No one attempted to say that he was right and all the world wrong, but each was perfectly willing to have his work tested by the crucible of the great minds, and the experience of his fellow-workers in the profession, and if valuable to have it recorded for the benefit of posterity, or if worthless, to have it cast aside and forgotten. Such a spectacle is not often beheld. Here were upwards of three thousand of the foremost minds of the profession, some of them from a great distance, collected together, to discuss questions of vital interest, not only to the profession, but more especially to the welfare of mankind in general.

The meeting was opened by H. R. H. the Prince of Wales, and among those present may be mentioned such names as Sir Jas. Paget, Virchow, Jenner, Charcot, Langenbeck, Pasteur, Volkmann, Esmarch, Kuester, Panteleon, Trelat, Pancoast, Flint, and many others of equal eminence. The addresses were all, without exception, of the highest order of merit, and the work of the different Sections was of the greatest possible interest and importance, from a professional point of view. The entertainments were almost unlimited, and some of them of unsurpassing grandeur, the *tout ensemble* of the entire gathering making it one long to be re-

membered by those who had the good fortune to be present.'

The meeting of the British Medical Association, which was held in the Isle of Wight almost immediately after the former, and which is usually considered the great medical event in England, although in some measure overshadowed by the Medical Congress, was, on the whole, a very successful affair, and obtained some considerable notoriety through some remarks in the President's speech, and also by others present to the same effect, looking towards a certain degree of professional intercourse with homœopathic practitioners. The remarks were, no doubt, the outcome of the discussion which had been going on for some time previous regarding Dr. Jenner's refusal, and Dr. Quain's acceptance of a consultation with Dr. Kidd, at one time a pronounced homœopath, during the illness of the late Lord Beaconsfield. We, in common with many others, felt a good deal of sympathy with Dr. Quain's position in this matter, and believe that, under all the circumstances, he acted not only judiciously but also in the best interests of the profession, inasmuch as he was informed by Dr. Kidd that he was not treating his patient homœopathically. There could, therefore, be no other than a merely sentimental ground of objection to meet Dr. Kidd, and give the benefit of his skill to an illustrious man. There may be times and circumstances in which an opposite course would be the most politic, but certainly not in the case referred to, where the life of one of England's greatest men hung in the balance. This was no time for any mere sentimental objections to obtrude themselves, and certainly Dr. Kidd cleared the way of all others.

The American Medical Association met in May in the city of Richmond, Va., under the presidency of Dr. Hodgen, of St. Louis, and was attended by about five hundred delegates from all parts of the Union. The address on surgery was delivered by Dr. McGuire, chairman of the surgical section. He advocated operative interference in penetrating gun-shot wounds of the abdomen with intestinal injury, and the use of the drainage tube. Dr. M. Pepper, of Philadelphia, delivered the address in medicine, in which he dwelt upon the great importance of local lesions as forming the cause of many apparently obscure diseases. He also alluded to the value of remedies possessing special antidotal power against contagious diseases, and referred to the remarkable results recently observed in the treatment of diphtheria by the use of large doses of bichloride of mercury. In the business part of the proceedings, a resolution was passed and a committee appointed relative to the establishment of a weekly journal for the publication of the transactions, similar to the *British Medical Journal*, in lieu of the present system. Dr. J. J. Woodward, of Washington, was elected President for the ensuing year, and St. Paul, Minn., selected as the next place of meeting, on the first Tuesday of June, 1882.

The Canada Medical Association met at Halifax, N.S., on the 3rd of August, under the Presidency of Dr. Canniff, of Toronto, and although the attendance was not large, yet the meeting was on the whole a most successful one. The address of the President, on the subject of "Medical Ethics," was one which much required reviving, and was well received by the profession. The papers read were of more than ordinary merit, and elicited considerable discussion of a profitable character. The Committee appointed at the last meeting relative to the establishment of a Bureau of Health for the Dominion, reported the result of their interview with the Government, which was on the whole very satisfactory, though nothing definite had yet been accomplished. Dr. Fenwick, of Montreal, was elected president for the ensuing year, and Toronto selected as the place of meeting on the first Wednesday in September, 1882.

The inauguration of a Medical Association for the Province of Ontario was begun and successfully carried through in the early part of the year. The first meeting was held in Toronto, on the first and second of June, under the able presidency of the venerable Dr. Workman, and was a grand success, in every sense of the word. Many excellent papers were read and discussed, and much real substantial work done, and the profession in this Province is to be congratulated upon the successful organization of an association which promises so well for the future. The next meeting will be held in Toronto under the presidency of Dr. Covernton, on the first of June, 1882

In the field of medicine and therapeutics, the advances have been chiefly towards a consolidation of past gains and the elimination of former errors. Our knowledge of the localization of cerebral functions has made some progress. In addition to the

localization of motor areas, Dr. Ferrier has recently defined the areas of sight and hearing. Some interesting facts relating to the temperature in General Paresis have been brought forward during the past year. Dr. Reinhart (Archiv), states that this disease may be diagnosed from other forms of mental disturbance, by the relative excess of the temperature of the head over that of the body, and by the great variations of bodily heat from day to day. Dr. Crœmer, (Allgemaine Zeitschrift,) asserts that the bodily temperature is abnormally low, and insists in the daily oscillations described formerly by Dr. Clouston, and which seem to be characteristic of the disease. Dr. Allara, (Sperimentale, 1881,) expresses his belief that bronchocele is caused by drinking water containing a silicate of an alkaline base, and that the administration of the alkaline carbonates, owing to the power they have of decomposing these silicates, has a beneficial effect upon the disease. The practice of washing out the stomach in certain diseases has again been revived. Dr. Constantine Paul, in (*Bul. Gen. de Therap.*), speaks in high terms of the advantages to be derived from it in certain cases. He prefers the syphon tube to the stomach pump, and recommends first a quart of plain warm water, to be repeated until it returns clear, and then a weak alkaline solution of bicarbonate of soda, or an antiseptic one of hyposulphite of sodium as may be required. Dr. McL. Hamilton, of New York, recommends a new silver salt, the tribasic phosphate of silver, in nervous diseases. The dose is from one-third to half a grain three times a day in glycerine. Its use may be continued for months, as it does not discolour the skin. He has employed it with advantage in cases of spinal sclerosis, myelitis, epilepsy and cerebral tumor. Dr. Schwarz, (*Dtsch. Me . Woch.*) strongly recommends iodine and iodide of potassium in membranous croup, believing them to be the true remedies in uncomplicated cases. The value of pilocarpine has also been much vaunted in the treatment of this affection by Dr Guttmann, who claims that in doses of $\frac{1}{15}$ to $\frac{1}{60}$ of a grain, every hour, it produces salivation, and also loosens the membrane. The results of its use however, have not been so good in other hands as they appear to have been in his. Papayotin is also said to possess the power of dissolving the membrane in croup and diphtheria, but it has not been thoroughly tested.

Dr. Tompkins (*Lancet*, March 1881,) speaks very highly of the antipyretic action of salicylate of sodium in typhoid fever, and reports the results of forty-six cases in which it was employed. He gives it in 15 to 20 grain doses every two hours, commencing its use whenever the temperature reaches 102° F. This is continued for about six doses, when the temperature will be found to have fallen two or three degrees; the dose is then diminished one-half. One objection to its use is, that it is liable to disagree with the stomach. This remedy has also been used by M. Labbè with varying degrees of success in neuralgia. Duboisine given hypodermically in doses of $\frac{1}{80}$ to $\frac{1}{120}$ of a grain, has been found very serviceable by M. Desnos (*Bul. Gen. d. Therap.*) in the treatment of exophthalmic goitre. The action of the heart becomes steadier and slower, the goitre pulsates less, and the general health improves under its use. The use of inhalations in the treatment of phthisis has again been revived. This method of treatment is not only advocated by Dr. McKenzie, of Edinburgh, but also by Drs. Coghill and Hamilton, in the *Brit. Med. Jour.*, May 28, and July 2. Inhalers for the purpose have been devised, which answer the requirements, and the substances used are, tinc. iodini ætherialis, acid carbolic, and creasote either separately or combined as may seem most suitable, and much benefit is said to have been derived from the treatment. Nitroglycerine is a new remedy which has received some degree of attention during the past year. The dose is one or two drops of a one per cent. solution. The action is somewhat similar to nitrite of amyl, in reducing systemic contraction. It has been used with benefit in angina pectoris, in acute and chronic Bright's disease, migraine, &c., &c. The efficacy of quebracho in all forms of dyspnœa shows it to be a most valuable addition to our therapeutic armamentarium. The dose is from twenty to sixty drops of the fluid extract every hour or two, as called for by the emergency of the case without reference to the exciting cause.

In the domain of surgery considerable activity has been manifested, and some new and important principles have been adopted. The invention of Faure's, storage battery, and Swan's electric light, seems to open up the way to greater usefulness of this wonderful agency in surgery. The storing up of electricity for use in the removal of a nævoid or

cancer of the tongue, is a feat little contemplated a year or so ago; and Swan's light will enable the surgeon to test the translucency of parts under examination, or the character of the interior of organs capable of being reached in this way. Abdominal surgery has been pushed to the extent of operating for the removal of hydatids of the liver. Lawson Tait, reports 6 cases in which the operation was successful, and yet no attempt was made to conduct the cases upon Listerian principles. Keith's recent successful cases also show that his former success was not due to Listerism, but to the care and cleanliness so greatly observed by that master surgeon in the treatment of all his cases. Several successful cases of gastrotomy and laparotomy have been reported from time to time during the year, all of which lead us to hope much for the future of peritoneal surgery. In the operation of tracheotomy in croup, Dr. Mastin, *Annals Anat. & Surg.* dispenses entirely with the canula, or any mechanical contrivance, and uses only wire or threads to keep the wound in the trachea open; while Golding-Bird has adopted a new plan of mechanical treatment, which consists in the application of an instrument somewhat similar to a nose speculun, to keep the tracheal wound open. Operators are gradually discarding the old-fashioned tubes as being dangerous from their irritation, and also their liability to become clogged up. Prof. Billroth has successfully performed the operation of ex-section of the pylorus for cancer. The disease involved the pylorus and about $\frac{1}{3}$ of the stomach. The duodenum was cut across, and the stomach divided above the seat of disease. The large opening in the stomach was then sewed up, until an opening was left about the size of the duodenum which was then stitched into it. Fifty-four carbolized silk ligatures were used; no unfavorable symptoms followed the operation. Ice was given by the mouth for the first few hours, and after that milk in small quantities. On the 8th day some solid food was allowed. He also performed the operation of excision of a cancerous stricture of the sigmoid flexure, forming an artificial anus in the groin, but the patient died about thirty-six hours afterwards from diffuse peritonitis.

M. Koeberle reports, in the *Gaz. Hebdom*, the most successful case of resection of the intestine yet recorded, viz., the removal for intestinal obstruction, caused by cicatricial contraction, of two metres (about six feet six inches) of the intestine. The result was a perfect success, with entire recovery of the patient. An ingenious application of the principle of the elastic bandage of Esmarch has been made by Trendelenburg in amputations at the hip-joint. It consists in passing a large needle, armed with an elastic cord, in front of the joint, and tying it before cutting the anterior flap; then disarticulating, and repeating the same procedure behind, before cutting the posterior flap, thus rendering the operation almost entirely bloodless. Several cases of removal of the kidney, some successful and some not, have been reported during the year, the result upon the whole being such, however, as to warrant the advisability of the procedure in certain cases. The spleen has not been disturbed more than once or twice during the past year, and these cases terminated fatally. One of them was performed by a Detroit surgeon. The operation is not growing in favor, and spleeny people will have to go unrelieved until some other mode of treating this organ is hit upon. Dr. Bryant reports several cases in which early amputation of diseased joints has had the effect of causing decided improvement in the condition of the lungs, previously involved in tubercular disease; the inference being that the presence of tubercles in the lungs is not a bar, as formerly believed, to an operation. In the *Lancet* for May 28, Dr. McEwen reports a successful case of transplantation of bone in a child four years of age. The shaft of the humerus had become necrosed; there was no attempt at osseous repair, and the limb was useless. Making a groove in the centre of the soft tissues, he placed therein small fragments of wedges of bone, removed from other patients for curved tibiæ. The result was the formation of a new shaft and complete restoration of the use of the limb.

In Obstetrics and Gynæcology there is nothing which may be said to be very new or startling though much that is interesting. In the management of ruptured perineum most gynæcologists are now agreed upon the propriety, as a rule, of immediate treatment by means of silk or silver sutures. Cases so treated, if properly stitched, generally do well, and the patient is spared a great deal of worry and after trouble. A considerable degree of success has attended the treatment of rupture of the uterus

by washing it out with carbolized water and inserting a drainage tube. Dr. Frommel of Berlin gives a report of eight cases, in seven of which laparotomy was performed and all died, while the eighth case, treated by irrigation and drainage recovered. In the *N. Y. Med. Journal* for February, Dr. Noeggerath gives some improvements in the operation of ovariotomy which are worthy of a passing notice. One drachm of potassium bromide is given daily to the patient for two or three days before the operation, and thirty grains of chloral per rectum after. The patient during the operation, to prevent lowering of the temperature, is placed on a rubber bed filled with water at 100°F. He makes his incision through the skin and superficial fascia, then plunges in a trocar and empties the cyst before opening the peritoneal cavity, If the escaping fluid is thick or grumous he injects a 2½ per cent. solution of carbolic acid to disinfect the fluid in the event of any of it passing into the abdominal cavity during the operation. After the cyst is emptied, he then opens the cavity and removes it in the ordinary way. Renewed attention has been given to what is known as Crede's method of removing the placenta, viz: by expression; and Crede himself has written an article in the (*Archiv,*) to show that his method does not consist in an immediate expression of the placenta. He places the hand upon the uterus and moves it about gently, waiting for a contraction. Then the uterus is grasped and pressed towards the hollow of the sacrum. In pruritus vulvæ, Dr. Wiltshire (*Brit. Med. Journal*) adopts Friedreich's view, that nearly all local applications that give relief are parasiticides, and that the pruritus is due to the development of fungous organisms. He recommended borax wash, grs. xii. or more to the ounce, mercurial ointment, corrosive sublimate used with caution, iodine, chloral, hydrocyanic acid, etc. Spencer Wells gives the particulars of 200 additional cases of ovariotomy, making 1000 in all in (*Brit. Med. Journal*, March 5th): 231 of the patients had died, and 769 recovered. The percentage of mortality had steadily diminished from 34 in the first 100 to 11 in the last. Dr. Mahomed Smith, (*Lancet*, July 16), reports most gratifying success in the treatment of puerperal convulsions with hypodermic injections of morphia, viz: from a quarter to a third of a grain. This is in accord with the experience of Dr. C. P. Clark, (*Amer. Jour. Obstet.*), July 1880. These facts would lead to the assumption that nervous irritation is a prolific cause of this affection. Chloral hydrate and chloroform or ether, also have a beneficial effect, no doubt upon the same principle, and those who would readily administer the latter may yet have some misgivings about the advisability of the former. Dr. Goodell, (*Med. and Surg. Reporter*) expresses the opinion that the most common cause of laceration of the cervix is from too early rupture of the membranes, and states that as a rule the accoucheur should wait till the os is dilated.

Among new books, and new editions of old ones published during the year, may be mentioned Lusk's Midwifery; Glisan's do.; Flint's Practice of Medicine; Bryant's Surgery; Diseases of the Skin, by Duhring; Materia Medica and Therapeutics of the Skin, by Piffard; Albuminuria, by W. H. Dickenson; Bosworth, on the Throat; Wood's Library; Ziemssen's Cyclopædia, vol. IX., Supplement and Index; Beard & Rockwell's Electricity; Tyson on Bright's Disease and Diabetes; Flint's Physiology; Foster's do.; Agnew's Surgery; Magnin on Bacteria; Benedikt on Brains of Criminals; Cutaneous Syphilis, by Fox; Diseases of the Nervous System, by S. Weir Mitchell; Morton on the Eye; Niemeyer's Practice of Medicine; Holmes' Surgery, vols. i. and ii.; Reynold's Practice of Medicine; Bartholow's Medical Electricity; Index Catalogue, Library Surgeon-Genl's. Office, U. S.; Taylor's Medical Jurisprudence; Clowe's Chemistry; Green's Pathology; Van Buren on Diseases of Rectum: Holden's Landmarks; Satterthwaite's Histology; Fothergill, on Indigestion; Harrison on the Urinary Organs; Smith on Diseases of Children; Hartshorne's Essentials, &c., &c.

The obituary notices are more numerous than usual. Among those of our own confreres who have paid the debt of nature, may be mentioned Hon. Dr. Brouse, Ottawa; Dr. Mack, St. Catharines; Dr. Berryman, Toronto; Drs. J. K. Oliver, Kingston; W. Harkin, Vanleekhill; H. F. Tuck, Orangeville; A. H. Fraser, Brockville; E. S. Belleau, St. Michel, Que.; H. B. Forman, Parrsboro, N.S.; Wm. B. Malloch, Brockville; R. F. Godfrey, Montreal; J. G. B. Morrison, Metaghan, N.S.; W. Mostyn, Almonte; M. M. P. Dean, Keene, Ont.; G. P. DeGrassi, Toronto; J. P. Nash, Picton; J. A. Gregory, Fredericton, N.B.; G. Burnham, Peterboro; A. W. Herrington, Carman City, Man.; W.

Lambert, Amherstburg ; N. Fleming, Mildmay, Ont.; H. Parsley, Thornbury ; A. Chapman, Muskegon, Mich.; J. A. Purney, Shelburne, N.S, ; A. Robertson, Liverpool, N.S.; J. G. Bibaud, Montreal ; N. Munro, Detroit, Mich.; W. G. Middleton, Stella, Amherst Isld.; A. McMichael, Gorrie, etc., etc. Among those in distant lands we find the names of Bouillaud, of Paris ; Wilms, of Berlin ; Dr. Sanders and Andrew Wood, of Edinburgh ; Professor Rolleston, M.D., of Oxford ; Skoda, of Vienna ; Dr. Bradford, of Manchester ; Prof. Schleiden, of Frankfort; Spiegelberg, of Breslau; McClintock and Hayden, of Dublin ; Foulis, of Glasgow ; Hays, of Philadelphia ; Greene, of Portland; Bache, of Philadelphia; White, of Buffalo, and many others.

We need scarcely allude to the assassination of the President of the neighboring Republic, as the circumstances are still fresh in the memory of our readers, who perhaps more than any other members of the community took a deep interest in the progress of the case, and also in the surgical treatment of the patient. Nor need we refer to the last act of the drama which is now being *played* in an American Court of law. The year has been more prolific than usual of disasters at sea, and on land, the latest and most harrowing of which was the burning of the Ring Theatre in Vienna, attended with an appalling loss of life, which might easily have been averted in great measure had there been ordinary care taken to permit of ready escape from the building in case of accident. The country has upon the whole been very prosperous, and free from any serious epidemics or plagues, except the too frequent occurrence of malignant diphtheria, chiefly in Quebec and the Maritime Provinces. We conclude by wishing our readers, one and all, a happy and prosperous new year.

Alleged Advertising.—In our last issue we referred to a case of alleged advertising by a prominent medical man in Port Hope. We are glad to be able to say that since then we have received a letter from the editor of the "*Times*" in which he states that the medical gentleman in question has never written any paragraphs for the paper, and was in no way responsible for the one alluded to ; on the contrary he has invariably requested that his name should not appear in the paper in connection with any item or accident of a medical or surgical character. The editors of the *Guide* and *News* corroborate in effect, the above statement. The medical gentleman must, therefore, in justice be entirely exonerated from all blame, and we regret that any injustice should have been done him in the matter.

Vexatious Litigation.—We understand that an attempt is to be made to revive the Tost-Freeman case, which was reported in the *Lancet* for March 1881. This was an action brought by one Tost, against Dr. Wm. Freeman of Georgetown Ont., for alleged malpractice in the treatment of a fracture of the forearm. The case after considerable delay was tried before Justice Galt, at the Hamilton Assizes, in January last, and after hearing the evidence the Judge very properly refused to allow the case to go the jury. The renewal of this case now, is a great hardship, for if it should go to trial, the hard earnings of a diligent practitioner will have to be spent in defending himself against a man worthless in every sense of the word, backed by men who should be above lending themselves to anything so contemptible.

Correction.—It appears that we, as well as many others, were in error, in the statement that the surgeons in attendance on the late President had sent in their bills for services rendered. The *Medical Times*, Phila., speaking with authority from Dr. Agnew, says that no bills have been sent, and that the matter of remuneration will be left entirely in the hands of Congress.

Appointments.—Dr. L. D. Migneault has been appointed to the Chair of Anatomy, in Victoria Medical College Montreal, made vacant by the death of Dr. Bibaud.

Dr. L. McFarlane of this city, has been appointed to fill the unexpired portion of the term of the late A. F. Campbell, M. D., in the Senate of Toronto University.

Dr. Louis Elsberg of New York, has been appointed Professor of Laryngology, and Diseases of the Throat, in the Dartmouth Medical College, having resigned his Professorship in the Medical Department of the University of New York.

Dr. McMillan of Alexandria, has been called to the Senate of the Dominion ; and rumour has it that Dr. McInnis of New Westminster, B. C., has also been appointed to a similar position.

CORONERS.—Dr. R. W. Clark of Hastings Ont., has been appointed associate coroner for the Counties of Northumberland and Durham Ont.

Dr. Stanley Scott of Newmarket, has been appointed an associate coroner for the County of York.

Dr. W. H. Taylor, of Bradford, has been appointed an associate coroner for the County of Simcoe.

BRITISH QUALIFICATIONS.—W. F. Cleaver M. D. Kingston, has been admitted a member of the Royal College of Surgeons England. Drs. M. L. Cameron, W. Gunn, H. R. Elliott, D. McTavish, and W. Cormack, have received the double qualification of L. R. C. P., & S. Edinburgh; and Drs. E. A. Stutt, A. McC. Sloan, and G. Wilcock, have received the L. R. C. P., Edinburgh.

F. O. S.—Dr. F. P. Taylor of Charlottetown, P. E. I., has been elected a Fellow of the Obstetrical Society of London, England.

Dr. St. Jean, has been elected mayor of Ottawa, without opposition.

Books and Pamphlets.

1. LECTURES ON DIGESTION: By E. A. Ewald, lecturer in the Royal College of Berlin, etc. etc.
2. INDIGESTION AND BILIOUSNESS: By J. Milner Fothergill, M.D., M.R.C.P., etc. etc., London.
3. FOOD AND DIETETICS: By F. W. Pavy, M.D., F.R.S., F.R.C.P., etc., etc.
4. GENERAL MEDICAL CHEMISTRY: By R. A. Witthaus, A.M., M.D. Professor of Chemistry and Toxicology in Vermont University, etc., etc., etc.
5. THE WILDERNESS CURE: By Mark Cook.

The above books are all from the enterprising press of Wm. Wood & Co., New York. We have done our best to get through the first three, but we regret to have to confess that the condition of our digestive powers was very little improved by the undertaking. Somebody, and he was no fool, said those who digest well, have never found out that they have a stomach. This was not our state of mentality on relinquishing the perusal of the gastric triad which heads our present list. How could one swallow, without feeling flatulent and squeamish, the following dose, presented in Dr. Ewald's 9th lecture?

"If," says the author, "I were to give you a table of the action of the pancreas on albumen and gelatine, similar to that for pepsine, leaving out chemical details" (thanks, dear Ewald, for the grace) and accepting Kühne's views, it would take the following shape:

Albumen x. Trypsin (Pancreatin)x. Soda solution of 1 p. c. forms, at the body temperature, first globulin insoluble in water, and then:

Hemipeptone.—Leucin, Tryosin, Hypoxanthin, Asparaginic Acid, Glycoll: Normal Digestive Products. *Antipeptone.*—Indol, Phenol, Fatty Acids, Ammonia, Sulph. Hydrogen, Carbonic Acid:

Are not the above jawbreakers, enough to turn topsy-turvy the whole process of digestion, and to make a prudent person forswear forever the mastication of a particle of gristle? for from this tissue, roasted, boiled or stewed, come forth the seven *half-toned* abominations, which generate *bacteria* and *micrococci*, and who knows how many more of their *ad infinitum* backbiters. Let the reader hear and ponder well. "It scarcely needs to be mentioned that the occurrence of the bodies described as products of putrefaction" (bah! sulph. hydrogen) "is contemporaneous with the development of bacteria," (back out, if you can, from that,) "and micrococci, as an almost universally admitted result of them. These organisms are taken up with the food, and find in the intestine a favourable nidus for their development." Alas, for us defenceless, human bipeds! but thrice happy "just killed dogs and rabbits," in whom Ewald has "never found bacteria or micrococci;" yet dogs eat gristles and bones whenever they are fortunate enough to light upon them, nor is it very common with them to eruct sulphuretted hydrogen. This must be the result of their ignorance of organic chemistry.

Here is another truly startling fact, which we have shuddered over, in Ewald's 10th lecture.

"But if we turn away from this practical point," (whatever that was) "it is certainly very interesting that phenol, which we make use of extensively every day for its antiseptic properties, should be found as a product of putrefaction, and that actually in our own intestines!"

And why not? Should not home manufactures be encouraged? and is it not a homœ-opathic certainty that like cures, (or kills), like? Have not Jenner and Pasteur proved that infinitessimal contagionation of men and animals proves re-

pellant to future invasion? If, however, we have in our intestines already from gristle-eating, a sufficient amount of phenol and sulphuretted hydrogen, etc., etc., to fertilize the soil for the germination of bacteria, may we not kill out these vermin by too high enrichment of the soil? Eureka! Too much of any good thing is just enough. "The baccy hick, if you be well, will make you sick; but the baccy hick, if you be sick, will make you well."

But parting with phenol and fun, here is a passage from Ewald's 12th lecture, which we humanely commend to a certain number of highly valued friends, whose groanings and moanings over rebellious bowels, ill-natured head-aches, sleeplessness and morning lassitude, often distress our vibrating sympathies.

"The intervals between meals are often too long, between others too short. It is so particularly with us," (Germans), "but especially in England and America, where the custom is to eat a large breakfast, and then go till evening without eating hardly anything, and at six o'clock" (rather seven) "to take another meal, naturally then in abnormal quantity. This not only causes inactivity of body and mind, which always accompanies the digestion of large meals, but is is the cause of numerous disorders of the digestive system, especially of the stomach."

"Abnormal quantity!" Not a word as to quality, multitudinosity, gastric goading, spicings, and saccharine enticings? Why! the poor man knows little of English and American *gourmandise*. Best so, for must not doctors and druggists live? And are not these late-dining big eaters, the very cream of their support? They certainly are, and it would be a crying sin to intercept their patronage, or to try to suppress their self-sacrificing virtue.

Well, this little volume of Professor Ewald's has monopolised so much of our attention and space that we have too little left for the four others lying before us. Fothergill's *Indigestion and Biliousness* is both a racy and instructive book. We quote but the following paragraph from the conclusion, to satisfy every sensible mother, and every common sense doctor, that the author has had some personal experience of the unpleasantness (to both parents) of icy cold feet, both in themselves and their babies.

"Cold hands and feet are a very frequent indication of imperfect nutrition in children. These should be attended to, the children should not be allowed to go to bed with icy feet, which will often be the means of causing wakefulness for some length of time after retiring."

Dr. Pavy's "*Food and Dietetics*," being inscribed to the Right Honourable Lyon Playfair, M.P., C.B. and F.R.S., we take for granted must be a work of considerable merit. We do, however, sincerely trust that the author has not made personal *provings* of more than a limited percentage of the *alimentary substances*, *beverages* and *condiments*," whose dietetic and other properties he details. If, unfortunately he has fallen into this mistake, he will do well to read "*Cook's Wilderness Cure*," and come across to the Adirondacks.

WALSH'S PHYSICIANS' CALL-BOOK AND TABLET FOR 1882, Sixth Edition. Also, WALSH'S PHYSICIAN'S HANDY LEDGER, published by Ralph Walsh, M.D., Washington, D.C.

Walsh's visiting list is very convenient in size and form, easily carried about in the pocket, and well adapted for the purposes intended. It is ruled to accommodate a practice of thirty-five patients per week for one year. The erasing tablet is a special feature, and will be found very useful. The Handy Ledger, is a day-book and ledger combined, and is peculiarly adapted to the practitioner's wants. It will accommodate 600 or 1200 names according to size ordered. The simplicity of the method is what commends it especially to the attention of the profession. It is so arranged that the gross amount and items of any account may be readily ascertained in a moment.

THE MONTREAL WITNESS, PUBLISHED BY J. DOUGALL & SON, MONTREAL.

The proprietors of this paper announce for 1882, the following features besides the ordinary news department, viz., a Legal, Agricultural, Veterinary, Poultry, and Apiary department, each presided over by thoroughly competent persons. The paper is liberal in tone, has no party connections, but supports on every question what it believes to be right. The following premium pictures are offered with the *Daily Witness*. "The Roll Call after the battle of Inkerman," and "Quatre Bras," representing the first stroke of Waterloo; and either of the above pictures with the *Weekly Witness*. Price of the *Daily*, $3.00; *Weekly*, $1.10; *Northern Messenger*, for young people, and Sabbath-schools, 30 cts. per annum.

Births, Marriages and Deaths.

On the 28th Dec., Dr. E. Cook, of Norwich, in the 77th year of his age.

THE CANADA LANCET,

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Original Communications.

POISONING BY STRAMONIUM.

BY CASEY A. WOOD, C.M., M.D., MONTREAL.

Attending Physician to the Woman's Hospital; Professor of Chemistry and Medical Chemistry, University of Bishop's College.

[*Read before the Medico-Chirurgical Society, Montreal.*]

Instances of poisoning by the various parts of the Jamestown weed are sufficiently uncommon to make them worthy of record. In the following case I was, fortunately, able to watch the patient throughout the whole illness.

At half-past six on the evening of the 17th of September last I was sent for hurriedly to see a little girl, aged five, who was said to have been poisoned by eating castor oil seeds. On my arrival at the house I found, from the mother, that the little patient had been in perfect health previous to her present illness, which had come on suddenly at five o'clock, and within twenty minutes after eating, as was then supposed, part of a castor oil seed capsule. I also learned that she first complained of great dryness in her throat and burning at the roof of the mouth, and had asked for a rag and a cup of water to wash her tongue. The child since then confessed, that she wanted the water to wash off the remains of the poison which she thought she felt in her mouth. Shortly afterwards she complained of being very thirsty, but seemed unable to swallow the water that was offered her. She then said she was sick at the stomach, but did not vomit, although she made several efforts to do so. The child's mother, noticing for the first time, that there was something wrong with the child's eyes, and that her face was flushed, told her to lie down, which she did and soon fell asleep. Fifteen minutes afterwards she awoke, complained of pain or burning in the pit of her stomach; got up from the sofa on which she was lying and tried to walk across the room, but was unable to take more than two or three steps without falling, and yet she did not complain of giddiness or of ringing in her ears. Twitching of the muscles of the forearm and leg was the next symptom noticed, soon after which she became delirious. In the early stage of the delirium, she frequently protruded her tongue as if it felt hot, or to indicate a desire for water. When I saw her, an hour and a half after eating the seeds, she was lying on her back apparently unconscious, delirious, and in convulsions, making every now and then an attempt to catch with her hands imaginary objects in the air. Her eyes were bright and glistening; the conjunctivæ red and injected, and the pupils widely dilated and insensible to light. The delirium was of the "busy" kind; she would talk rapidly and incoherently for a time and then break out into laughter. This might be succeeded by a short fit of crying accompanied by an expression of terror on her face; or she would suddenly start back as if some object were about to fall on her. On several occasions this state of fear was brought about by some one approaching or stooping over her, and she twice appeared to attempt to strike one of her sisters who came near the bed. The convulsions were general; the twitchings of the hands and feet being plainly marked throughout. The skin of her whole body was dry, felt hot and was of a deep bright scarlet color. The temperature was normal, the pulse small and accelerated, but owing to the convulsive movements of the child's body I was not able to count it accurately. Her breathing was interrupted but not rapid. These symptoms did not of course indicate poisoning by castor oil seeds, and I had little difficulty in identifying one of the supposed *ricinus* capsules shown to me with the thorny fruit of the *datura stramonium*. It appears that a neighbor, ignorant of the poisonous properties of the plant, had cultivated it for the beauty of its flowers, and having thrown several of them, "gone to seed," over his fence on to the sidewalk, they were observed and taken possession of by some children playing close at hand. My patient being one of the number, and having a predilection for original investigation had eaten part of one. As the poison had been taken on an empty stomach, and as it was probable that some of the soft albuminous pulp surrounding the seeds had been eaten as well as the seeds themselves, I concluded that the former

had been mostly absorbed and that the latter had passed into the small intestines. Added to this the insensible condition of the patient and the difficulty with which she swallowed, I decided not to make any persistent effort to bring on vomiting, but administered at once a strong purgative (of calomel and rhubarb, I think,) and followed it up by a large rectal injection of linseed tea and castor oil. She had in consequence of this several copious motions from the bowels. They seemed to relieve her, and with the last one, during the night, she passed three or four half digested stramonium seeds. At 7 30, and every subsequent hour until midnight, I administered 5 grs. each of chloral hydrate and potassic bromide, with a view of controlling the convulsions, but I think they produced little or no effect. At 1 a.m. I gave her a hypodermic injection of $\frac{1}{10}$ gr. of muriate of morphia, intending to repeat it if necessary. I was not obliged to inject a second qnantity, for in three quarters of an hour afterwards she fell into a troubled sleep which lasted until 10 a.m. next day. At 11 a.m. she was still nervous, with a red flushed face, twitching hands and widely dilated pupils—but perfectly conscious and able to give an account of how she obtained the stramonium capsules. The nervous and other symptoms passed off during the day but the mydriasis lasted all that day, the next night and part of the following Monday, when she seemed as well as ever. As far as I can learn by watching the evacuations and questioning the patient, and the children that were with her, she probably ate about half a dozen seeds and about the same bulk of the pulpy matrix in which they were imbedded. Even where comparatively large quantities of the plant are taken, people usually recover from the poison. Woodman & Tidy give an interesting *resumé* of datura poisoning cases in their work on Toxicology. A boy, aged 7, ate a qnantity of green seeds and after serious symptoms got well. Seven children, between 6 and 9 years of age, took each ten seeds and all recovered. A little girl ate ℥jss. of the seeds, and a boy, aged 4, a tablespoonful, and yet both recovered. However, Christison mentions a case where a decoction of 125 seeds was taken and death was the result in seven hours. So, too, there is a case recorded in the London "Medical Gazette," (vol. xv. page 320) in which 100 seeds were eaten by a child 2 years old and death resulted in 24 hours.

These different terminations may be foreseen if it be known whether the poison has been swallowed in the form of concentrated extracts or tinctures, or if merely the seeds have been taken. The one is the poison encapsuled, the other in solution.

The most interesting questions that arise in connection with this case refer to the detection of the poison, and I have endeavoured, with more or less success, to answer some of them. Would the urine of a person poisoned by so small a quantity of thorn-apple seeds and pulp give sufficient evidence of the nature of the poison?

And again, having proved the agent in question to belong to one of a certain class of vegetable poisons, have we any means of determining exactly from what plant it is derived?

To decide the first question I had preserved the first urine passed by the child after seeing her. This, voided at 10 a.m. on Sunday, and amounting to about ℥vi., was treated for me by my friend Mr. Bemrose as follows: liquor sodæ was added until the mixture became distinctly alkaline. This was shaken up with ℥ij. of ether, and on standing the supernatant liquor was removed by means of a separator. This process having been repeated three times the ethereal solutions were mixed and allowed to evaporate spontaneously. The solid residue was now dissolved in pure water acidulated with hydric chloride. Again, liquor sodæ was added and the resulting alkaline solution twice washed with ether. On evaporating the second ethereal solution there remained a thin film of nearly colorless, odorless, amorphous matter to which on the 29th of October, I applied the following test: I put one-half of the evaporated residuum into my left eye at 1.30 p.m., the introduction being followed by some smarting, tingling and lachrymation which, however, passed off in half an hour. At 3 p.m. I found the pupil dilated to its fullest extent and at midnight it was still in that condition. In the morning the dilatation was not so marked, and it gradually diminished until the pupil became normal 36 hours after the introduction of the agent. The chemical tests for those active principles that dilate the pupil are very unsatisfactory, so much so that the microscope is usually appealed to in preference. In this instance there was not enough of the agent to test it chemically, even if it were desirable. The remaining half of the film was dissolved in sulphuric acid and allowed to crystallize and at

the same time, for purposes of comparison, a weak tincture of stramonium was put through the ether process and similarly treated by means of hydric sulphate. The crystals obtained from the urine, though few in number, are well shown under the microscope, and allowing for the difference in the strength of solutions from which they were obtained the single prismatic crystals and clustered groups of needles on one slide will be readily identified with those of the other. Although the evidence obtained by the methods of which I have just spoken—the first giving proof of the patient's having taken a mydriatic poison and the latter demonstrating its existence as a crystallizable alkaloid or salt of an alkaloid, and showing its crystalline form—though these matters are settled, I do not consider it by any means positive proof of the exact nature of the vegetable poison; and for these reasons: In the first place it is not definitely decided by authorities what the shape of daturia crystals is, or even whether the alkaloid is not found in more than one crystalline form. Both Guy and Taylor say it is usually found in long colorless four-sided prisms and clusters of needles—just the condition of things you will observe under the two microscopes here—but Taylor ("On Poisons," page 743) mentions a case where the daturia assumed the form of pentahedral or polyhedral plates, instead of quadrangular prisms. Hyoscyamia and atropia, both of which dilate the pupil, have been found in one or other of these shapes.

But a far more serious argument against the assumption that the microscope is capable of determining the vegetable origin of mydriatic crystals is our positive lack of knowledge concerning the nature of the active ingredients of the poisonous solanaceæ. It is not yet definitely settled, for instance, whether daturia is the only active alkaloid in the thorn-apple, or indeed whether daturia is not simply hyoscyamine or a modified form of atropia itself. Attfield thinks it is either identical with or a modification of atropine. E. Schmidt in the journal of the Berlin Chem. Society for May. '81, asserts that the seeds of stramonium contain not only daturine but atropine and hyoscyamine. Ladenburg, in the same periodical for Sept. '80, says that hyoscyamine and atropine, though readily convertible, the one into the other, are decidedly different, but wherein this difference lies has not yet been discovered. Regnauld and Valmont, giving the results of an extensive examination o these alkaloids in the *Journal de Pharmacie et de Chemie* for July '81, conclude as follows: the atropine of medicine is a mixture in variable proportions of two isomeric crystalline alkaloids possessing the same therapeutic properties. One of these is atropine (*a*) (the atropine of Ladenburg)—the other atropine (*b*) or preferably atropidine, which is the hyoscyamine of Ladenburg. Atropidine exists in such abundance in belladonna that it forms about two-thirds of the crystalline atropine of the (French) codex. It is the crystalline alkaloid of all the mydriatic solanaceæ and of *duboisia myoporoides* and has been improperly named duboisine and daturinæ.

I think it must follow from these considerations that until we are better acquainted with the exact chemical and physical properties of their active principles, an examination of the urine alone will fail to determine which plant, in a given case, has been the source of the poisonous alkaloid,—and that although the symptoms, chemical and physiological tests, together with the microscope, may serve as valuable corroborative evidence from a medico-legal standpoint, the finding of the parts of the plant in the intestinal canal, or in evacuations therefrom, is the very best proof one can have.

THE ADMINISTRATION OF CHLOROFORM.

BY A. B. ATHERTON, L. R. C. P. & S., EDIN., FREDERICTON, N.B.

As there is no subject of more importance to every medical practitioner than the best means of guarding against the danger of death from chloroform, I may be pardoned for referring to the discussion which occurred at the last meeting of the Canadian Medical Association, in which the majority of the speakers seemed to favor the opinion that *syncope* was in most instances the cause of the fatal issue. I at that time took the position that such was not the case, but that it was generally due to *asphyxia*, and that one reason why the stoppage of respiration was not noticed was, that too much attention was bestowed on the pulse. Of course I do not mean to affirm that the heart is never seriously at fault in death from chloroform, but I do say that, in at least nine cases out of ten,

when trouble arises with persons who have no marked disease of that organ, the trouble comes from some interference with respiration. Nor can I now recall a single instance in which anything alarming occurred unless the *breathing* was at fault.

We all know that in many cases, the respiration under chloroform administration is carried on so noiselessly, that without the closest scrutiny in a good light it may become embarrassed and cease without one's notice. Again, the respiratory muscles sometimes act so as to cause movements of the chest walls, while the air is prevented from entering the lungs by closure of the larynx. And if one is not well on his guard, such action may be mistaken for good respiration, and the patient be allowed to go on till secondarily the heart ceases to beat and death occurs, which is then naturally attributed to syncope. In the 1877 edition of Erichsen's surgery, page 22, it is stated that Lister believes " that many of the deaths from chloroform in which the heart has been said to stop first were cases of this kind." I have often suspected too, that the very natural desire to escape blame has sometimes materially aided the microscope in detecting some fatty degeneration of the muscular fibres of the heart, which one sees frequently reported as having been found at the autopsy.

I have had my attention very forcibly directed to this subject since the late meeting of the Association, by a circumstance which occurred a few weeks ago in my own practice, and which is in part my reason for again addressing you in regard to the matter. I was operating on a patient while a younger member of the profession was holding the chloroform towel, and just as I finished the operation I noticed that respiration was not going on well, and it was with a good deal of difficulty that it was re-established. The Dr. remarked to me that he had hold of the pulse all the time, and that it had pulsated all right; and I doubt not he spoke the truth, for as soon as I dare take the time to examine it, I found it strong, full, and regular.

It is sometimes asserted, when one of these unfortunate deaths from anæsthetics occurs, that no *one* man should attempt to do any operation and at the same time give the anæsthetic. Now, while this may be possible in hospital practice, or in a large city, it is practically out of the question in country districts, and often so in small towns. How can it be expected that every time a dentist or practitioner of medicine requires to administer an anæsthetic, he must call in the assistance of another skilled person to aid him ? It is not always the case that medical men are so very friendly that they can call upon each other at a moment's notice for such services, and even if such were secured, it would generally be difficult to obtain from the patient an extra fee for them. And here it is that the advantage of attending to the respiration alone, shows itself more conspicuously even than in cases where a second man can be had to assist one. We can readily use our *eyes* to observe the breathing occasionally, while a tooth is being extracted or some other minor operation performed, but we could not so well spare a *hand* to feel the pulse.

Finally, at the risk of wearying your readers or of appearing egotistical, let me adduce some arguments in favour of the operation of opening the windpipe as a *dernier ressort* in cases of chloroform poisoning. In all such cases, where the less severe means have failed to bring the patient back to a condition of safety, it is of course of the utmost importance that no time should be lost in the application of our remedies; and on this account I maintain that tracheotomy (or laryngotomy as the case may be) is preferable to the application of boiling water to the chest or the use of the battery. For it is not always that hot water can be had at a moment's notice; neither is a battery often going by the patient's side, nor is it always even present or in good working order. Then, again, as in the case reported by me in the number of the LANCET for June, 1881, the assistance of a second person who can start your galvanic apparatus is frequently not at your immediate command. Furthermore, is not the lividity you get in chloroform asphyxia of such a pale whitish character that it may easily be mistaken for syncope, and lead one to neglect the use of a remedy for the restoration of breathing because he thinks it is the heart that needs to be excited to action. I know that in my own case the colour of the man's face was much like the pallor one gets in the last stage of diphtheritic croup, or perhaps more like that of death itself; and I am quite sure that I could not have told from *it* whether his case was one of asphyxia or syncope, until I made the incision in the neck and found a copious flow of venous looking blood from the wound.

It may be urged against the operation, that in the first place, every one can not be trusted to undertake it; secondly, that a tracheotomy tube (like the boiling water or battery) is not always at hand; and thirdly, that it is too serious an operation to be often or hastily done. In answer to the first objection, let me observe that it is almost always (if not always) in persons beyond the age of early childhood that trouble occurs, and in such the windpipe is generally easily reached. As to the necessity of a tracheotomy tube, it could in my own case have been dispensed with as a pair of forceps to hold open the wound for a moment or two till breathing became good through the mouth was all that was really needed. If, however, artificial respiration should be required, a suture in each lip of the wound in the trachea could be utilized to ensure the free ingress and egress of air, and that too without the assistance of a second person to draw forward the tongue or lower jaw, as would be necessary in an ordinary case. Finally, as to the serious character of the operation itself, every one knows that *per se* it is neither dangerous to life, nor does it lay a person up for a long time. I operated on my patient on Saturday morning, and on Monday afternoon he walked a mile, crossing the river on the ice, and on the following morning got on board the train and went home, a distance of more than 100 miles. In a few days the wound was quite healed.

Taking everything into consideration then, I submit that in no case of threatened death from an anæsthetic should we neglect, as a last resort at least, to try opening of the windpipe, and if need be, artificial respiration through the opening. For it may be that in spite of the drawing forward of the tongue or jaw, the free entrance of air may be prevented by spasm of the larynx or some other obstruction.

EXOPHTHALMIC GOITRE TREATED BY ERGOT.

BY J. STEWART, M.D., L.R.C.P. AND S., EDIN., BRUCEFIELD, ONT.

[*Read before the Canada Medical Association at Halifax.*]

Case I.—Miss W., aged 35, when seen for the first time in June, 1875, complained of a severe pain in each eye ball, with dimness of vision. She also complained of palpitation of the heart, and enlargement of her neck.

Past History,—She says she enjoyed excellent health up to her first menstrual period, which took place when she was only 11 years of age. She lost a great quantity of blood at this time. From her twelfth to fourteenth year the catamenia were irregular—sometimes once a month, sometimes once in four or five months. From this time up till the present she had menstruated very regularly every six weeks. She had been troubled with palpitation of the heart for eight years. Seven years ago she had pneumonia, followed by acute rheumatism. The latter assumed an intermittent character.

Family History,—Her father died at 60, from typhoid fever; mother at 45 from paraplegia, due, it was said, to softening of the cord. She lost a brother from dysentery, one from cerebo-spinal meningitis, a third from consumption, and a fourth was accidentally killed. Her only sister died from consumption. She is the sole survivor of a large family.

The history of the present attack dates from the month of October, 1874, when she began to be wakeful and nervous at night. After these symptoms had lasted for six weeks her eyes were noticed by a friend to be more prominent than usual. At this time her eyes were very painful. The pain was deep-seated, and extended back to the occiput. Her neck was enlarged and she had a constant inclination to swallow. Shortly after the appearance of the latter symptom she says the neck increased rapidly in size, and she was troubled very much with throbbing in it.

Present Condition (June, 1875.) There is a very marked prominence of both eyeballs, and abrasion of the cornea—this latter evidently due to the inability of the lids to cover the corneæ. There is a marked enlargement of the thyroid body, especially of its right lobe. The pulse is said never to be below 120, and on the least exertion it beats as high as 150 or 160. A systolic murmur, loudest over the base of the heart, is heard. Belladonna was given to her at this time for about two months, and seems to have had some effect in diminishing the ex ophthalmos, but with little or no effect on the other symptoms. During a visit to the United States she stopped the belladonna and took strychnine, and in such doses as to cause severe symptoms of poisoning. She was not benefitted in the least by

the strychnine, and on her return to Canada I put her under ergot, commencing with ten minim doses of the fluid extract three times a day. She was not taking this long before it was apparent that there was quite a diminution in size of the thyroid and less protuberance of the eyeball; but it was on the pulse that the beneficial effect was first seen. From a pulse constantly at about 140 it was reduced in a few weeks to about 100 to 110. This improvement continued steadily until the pulse came down to between 80 and 90. Simultaneously the eyeballs lost their prominence, and the thyroid underwent great dimunition in size. She continned taking the ergot for a year, the dose of which was increased to fifteen minims three times a day during the last three months of this period. At the present time (July, 1881,) she is perfectly free from all symptoms of her troublesome affection.

Case II.—Mrs. M., aged 32, married, two children, youngest aged 18 months. When first seen, in June, 1880, she presented all the characteristic symptoms of exophthalmic goitre in a pronounced degree, including the want of consentaneous movements between the eyelids and eyeballs.

Her family and previous history are unexceptionable. It was four years ago that she felt the symptoms of her present trouble in the shape of nervousness, weakness, and palpitation of the heart. For six weeks previous to the appearance of these symptoms she was much worried mentally, and overworked physically in nursing a child who had been ill with bronchitis and catarrhal pneumonia. It was soon afterwards noticed that her eyeballs were more prominent than they naturally were. Her husband "wondered why she stared so at him." About the same time appeared enlargement of the neck, principally on the right side. She continued in this state, now better, and now worse until I saw her in June of last year. Her pulse was constantly found to be 120, and on the least exertion it ran up to 150 and over, and she complained of great palpitation of the heart. She had been taking iron and digitalis for months, but without the least sign of improvement. She was ordered fifteen minim doses of the fluid extract of ergot, three times daily. She had not been long under this treatment when it was found that the pulse had been reduced to 100, and there was less palpitation of the heart. She could undergo exertion better, and expressed herself as feeling much improved. The next symptom found improved was the motions of the eyelids, which now followed the eyeballs, but still tardily. Then came reaction of the eyeballs and later diminution in the size of the thyroid body. She continued taking the ergot until three months ago, when she expressed herself as feeling so well that she thought it was unnecessary for her to continue the treatment any longer. On examination at this time the pulse was 80, there was no exophthalmos and the thyroid was normal in size. At the present time she is in excellent health, and no symptoms of her former trouble are to be detected.

Case III.—Mrs. S., aged 29, married, five children, youngest aged five. Consulted me in January of the present year, complaining of weakness, violent palpitation of the heart, and œdema of the lower extremities. Family and previous history good. Six months previously the first symptoms of her present trouble showed themselves. She commenced to feel weak, and her heart beat violently on the least exertion. The eyeballs became protuberant and she complained of having much pain in them. The thyroid enlarged very rapidly. When first seen the enlargement was very extensive, and she was greatly annoyed from "an almost constant beating in her neck and noises in her ears." She expressed herself as unable to go upstairs, on account of the violent palpitation and a sense of suffocation. The exophthalmos was extreme enough to prevent the lids from protecting the corneæ, and the latter, in consequence, were found abraded. Von Graefe's symptom was well marked. The pulse was found to be 140 and irregular. A loud systolic murmur, having its maximum intensity in the cardiac region, was heard. The lower extremities were œdematous. She commenced taking fifteen minim doses of the fluid extract of ergot three times daily, but in a few days this treatment was interrupted by a severe attack of pneumonia, from which, however, she made a good recovery. She has been taking the ergot now for about five months, and is still continuing it. She was examined on the 22nd of July, and it was found that she had much improved. The exophthalmos and goitre are both much less. She is not troubled now with pain in the eyeballs, beating in the neck or noises in the ears. Her pulse is 88, and active exercise has not any more influence in increasing it than it has in the normal state. The

œdema of the lower extremities has disappeared, but the mitral murmur still persists. She says that she feels well, and does not consider herself an invalid. When this patient first came under observation an unfavorable prognosis was given, on account of the severity of the symptoms, and the complication with what then appeared to be an organic disease of the heart, but judging from the late intermittent character of the murmur is likely functional. The pulse is still irregular and presents evidence of high tension.

A fourth case of exophthalmic goitre has come under my observation, but its onset was so sudden and its duration so short, I consider that the ergot which was given had but little to do with the result. It occurred in a girl, aged 18, who received a very violent shock in witnessing the sudden death of her brother, who was considered to be at the time convalescent from a mild attack of diphtheria. The disease made its appearance in this case in one night, and when seen the following day she presented a good example of a typical exophthalmic goitre. In about ten days all the symptoms had disappeared.

GENERAL RULES FOR THE GUIDANCE OF EXPERTS IN CASES OF SUSPECTED POISONING.—CIRCULAR OF THE MINISTER OF GRACE AND JUSTICE.

Translated from Rivista Sperimentale di Freniatria e di Medicina Legale, Reggio Emilia, Italy, 1881.

BY JOSEPH WORKMAN, M.D., TORONTO.

"The Commission constituted by Royal Decree of 11th April, 1880, for the purpose of studying the very grave questions related to evidence in alleged crimes of poisoning, and to the special characteristics of cadaveric poisons, has, in accordance with my request, suggested certain general rules which should be observed by the Judges and the experts, in order that the most important elementary facts, from which the proofs of the crime may be inferred, may not be lost.

"I now hasten to summarize these rules, to which I request the attention of the Attorney-General of the King, and the Judges.

"The Commission has deemed it proper to state primarily that it is of the greatest importance, as soon as the first suspicions of poisoning have arisen, that with all possible care and diligence, all the most particular facts relating to the progress and the morbid symptoms preceding death should be collected; for whilst the memory of these is fresh it is not difficult to succeed in this, but at a later period it is unusual to do so, unless incompletely and by means of ambiguous depositions, in consequence of which the judge is deprived of a very important criterion as to the true character of the case

"I regard it as his duty to recommend, with the utmost insistance, the adoption of such measures as may secure the better selection of medical experts to be entrusted with the first operations, exacting in them such guarantees of capability for the performance of their special work, as cannot be possessed, and indeed are but indistinctly possessed in general, by those who have attained to the doctorate in medicine and surgery. This is an error of omission in the primary researches which may result in irremediable loss of proof of the actual crime, and may open the way to the most unjust conclusions.

"Having premised so much I now submit the most important recommendations which, in the opinion of the Commission, should be considered by the magistrates and the expert dissectors; it is, however, to be understood that those ulterior proceedings, which the progress of the studies on the generic proof of poisoning, and chiefly on the fact of the formation of cadaveric poisons, which may appear necessary, are to be reserved, as well as the others which the peculiar characteristics of the cases may suggest to the said experts.

The Instructions to Experts.

"1st. The inspection and the section of the body should be made as soon as at all possible after death. Not only should the cavities of the thorax, abdomen and cranium, but also the vertebral canal be opened. The conditions of each viscus and tissue, and of the blood ought to be diligently examined, and the aid of the microscope should be availed of when necessary.

"2nd. For the preservation of the viscera and other substances to be subjected to chemical examination, well closed glass vessels, new, with ground stoppers, and not before used for any purpose whatever, and washed out with water and alcohol mixed, are to be employed.

"3rd. To the viscera and other substances placed in these vessels, there should be added as much alcohol as will, in excess, cover the solids. For liquids to be preserved half a volume in excess of that of such liquids will suffice, provided the alcohol be of the strength of 95 to 98 per cent; but if the strength be lower about one-fourth additional will be necessary.

"4th. Only chemically pure alcohol is to be employed, that is to say, previously redistilled, and deprived of every foreign substance.

"5th. In every case not less than half a litre of the alcohol employed is to be preserved separately in one of the glass vessels described, for the controlling chemical researches.

"6th. In another of the glass vessels the entire brain and spinal cord will be preserved.

"7th. In a third, both lungs, the heart, spleen, kidneys, and the urinary bladder (after being emptied of its contents), and as large as possible, a quantity of blood from the centre of the heart and the great vessels, will be placed. In this vessel may also be preserved the matters which have escaped into the thoracic cavity.

"8th. The urine is to preserved separately in a fourth vessel.

"9th. After application of proper ligatures the stomach and the small intestines are to be removed, successively opened, and their contents put into a fifth vessel, in which the stomach and intestine themselves shall also be placed, not, however, until after having instituted on each a most diligent examination, in order to discover whether there are any anatomo-pathological alterations; this intimation will also apply to every other viscus and organ. In this vessel the matters gathered from the abdominal cavity, when there are such, may be preserved.

"10th. In like manner is the large intestine with its contents to be treated, and to be preserved in a sixth vessel, and in case of the exhumation of a body, the excrement or deposit that may be found on the bottom of the coffin, may be placed in the same vessel.

"11th. In a seventh vessel the entire liver will be preserved.

"12th. A good portion of the muscles detached from the body, so as to avoid as far as possible including any of the adipose panniculum of the skin, will be placed in an eighth vessel. When it may happen that there is not at command a vessel of the required size, two may be employed instead of one. This observation will also apply to the substances mentioned in No. 7.

"13th. In special instances of the presence of traces of blisters, sores, fistulous sinuses or wounds, which may have been the possible passages of poison entrance, a portion of the tissue of the part should be removed, and preserved in another vessel. Particular parts injured in the buccal cavity and the pharynx, may indicate the nature of the suspected poison.

"14th. There should, in case of exhumation, be preserved in another vessel a sample of the earth surrounding the coffin, when the nature of the suspected poison may suggest the advisability.

"15th. Lastly, the dissecting expert is recommended to use the precaution of making deep and numerons incisions into the parenchymatous viscera and the muscles, before placing them in the vessels, so that the alcohol may readily penetrate them as far as possible.

"I commend to the judicial authorities this highly important subject, and I feel convinced they will not fail to conform to the recommendations and precautions above indicated.

"*Firm. Il. Ministro,*

"T. VILLA."

"ROME, 20th Feb., 1881.

Remarks:—We imagine that but few of our readers will aver that the preceding instructions of the Italian "Minister of Grace and Justice" (God save the mark!) fall short in exigent minutiæ. Though many of the suggestions (or commands) seem to be very appropriate, we fear the carrying of them into effect will be attended with more difficulty than the framers of them may have forecast. We certainly should not have so much faith in their technical observance in this country as to advise the introduction of the whole of them by our Attorney-General, unless he should bring up his ministerial courage to that measure of "Grace and Justice" towards medical experts, which hitherto he has not been able to reach. The editor of the *Rivista Sperimentale* informs us that he was not favoured by the Minister with a copy of the instructions, but by a legal friend, who wrote to him, stating, amongst other matters, that he considered the tariff of fees allowed to experts too low.

Here, then, was a *rarissima avis in terra*, a lawyer advocating better pay to doctors. We wish we could import a few of his feather into this Canada, under the hope that they would multiply, and teach our songsters of the bar, the bench and the legislature, a better style of music, and a higher order of grace and justice towards our body.

LACERATION OF THE CERVIX.

BY J. E. BROUSE, M.D., BROCKVILLE, ONT.

Never having seen, in any of our Canadian medical journals, a case reported of the above lesion, I cannot avoid believing that the great importance of the subject is not fully recognized by the profession in Canada; for if it were, there would scarcely be a monthly issue that would not contain a history of one or more cases. I do not expect to awaken much interest by the present communication, only hoping to induce at least a few of the profession to give this, not infrequent accident, more earnest attention.

The celebrated gynæcologist, Dr. T. A. Emmet, was the first to point out this lesion and to institute the operation for its repair. I have had the privilege of seeing Dr. Emmet operate on at least one dozen women for restoration of the cervical canal, and can bear witness to the great and, in the majority of cases, entire relief given. Dr. Emmet states, in his work, that 32.80 per cent. of all women who had passed under his observation and had been impregnated were found to have laceration of the cervix; and it has been fully demonstrated that nearly, if not, all cases of mis-called ulceration (erosion in reality) of the os, with profuse leucorrhœa and enlarged mucous follicles occurring in women who have borne children, have their origin in this lesion. It is only in very recent years that laceration has been diagnosed from ulceration and the early stages of epithelioma and corroding ulcer, and the mistake is yet only too common, for are we not constantly hearing of women who are the victims of ulceration of the womb when there is in reality no such disease of a non malignant nature? I attended a lady the past year who was told by her previous medical attendant, who treated her for several weeks with Chian Turpentine at $5.00 an ounce, that she had cancer of the cervix, (he diagnosed it by the smell of her breath) when she had merely a slight laceration with erosion and was cured in six weeks.

It is not needful for me to enlarge on the importance of diagnosing and treating this lesion, as anyone who has read the works of either Emmet or Thomas cannot fail to be deeply impressed with the fact that it is a most prolific cause of nervous disease and neuralgia in child-bearing women.

October 15th, 1881, I was consulted by Mrs. T———, who gave the following history:—Age, 34; seven years married; has had four children; no miscarriages. First labor protracted, instrumental delivery; second labor easy; third, instrumental. The fourth, which occurred in August, 1880, was extremely rapid, and followed by a larger blood discharge than usual, the flow continuing quite freely for three weeks. Does not remember at what age menses first appeared, but was regular from the first, and had no pain before, during or after periods. Is always unwell while nursing. Since her last confinement, her health, which up to that time had been good, has become very bad indeed. She has neuralgic pains all over the body, at times of so severe a character as to drive her nearly distracted. Often the pain is dull and aching, as though she had been beaten. The menses are not as regular as formerly, coming on more frequently and lasting from five to seven days. She now has great pain in sides, hips and legs before, during and after the flow. Her complexion is pale, dark under the eyes; face has a worn, tired appearance.

On examination, found the uterus low down in the vagina, the fundus lying in the hollow of the sacrum, and the cervix lacerated bilaterally to vaginal junction, much everted, and eroded with mucous follicles enlarged. A profuse discharge, of a dirty grey appearance, bathed the cervix, the everted lips of which were fully two inches wide. On passing the probe, the uterine cavity was found to be two and one-fourth inches in depth, and when the cervical flaps were brought into position, by a tenaculum in either one, the depth from os to fundus was three and one-half inches. The preparatory treatment was at once begun by applying Churchill's tr. iodine to the erosion twice a week, and ordering the use of copious hot water injections night and morning in the recumbent posture, at the same time endeavoring to improve the gen-

eral health as far as possible by appropriate medication.

Nov. 15th, the erosion having healed I operated for the restoration of the cervical canal, assisted by Dr. Vaux, of Brockville, Dr. Jackson giving the chloroform, and my nurse bringing the parts into view with Sim's speculum. She took the chloroform kindly, and although under its influence one hour, not more than half an ounce was given. I need not describe the operation, merely stating that it was done as it is so clearly and admirably detailed by Dr. Emmet. The case progressed without the slightest bad symptom, and after the second day the vagina was washed out with carbolized warm water night and morning. The sutures were removed Nov. 23rd, but she was kept in bed, not even allowing her feet out, for fear of cellulitis, for two weeks longer. When the parts had firmly united and all tenderness on pressure gone, I passed the sound and found the depth from os to fundus to be two and one-half inches.

Before the operation there being no *cul de sac* for a pessary to lie in, it was not posssible to keep the uterus in position, but now there was no difficulty in doing so, and she went home Dec. 15th wearing a nicely fitting Smith pessary and very much improved, not only in general health, but in all her nervous and neuralgic troubles. I have not heard from her directly since, but her husband told a neighbor of his that she was better than he thought it were possible for her ever to become.

That the bad results arising from this lesion may be, in a great measure, prevented, I have no doubt, were more care taken in cleansing the vagina with warm carbolized injections every day after confinement for at least three weeks, at the same time keeping the patient in bed. But so long as the acrid lochial discharge is allowed to flow over and constantly bathe the torn cervix, it is impossible for repair to take place, and when the lochia cease the woman is usually allowed to get up, and the womb, being large and heavy, gradually falls lower and lower, crowding the torn cervix on the vaginal walls, thereby producing eversion and effectually preventing union. Then follow in due course those functional nervous disorders and neuralgic troubles which render the lives of so many of our fruitful women a burden to themselves and an anxiety to their friends.

Correspondence.

ELECTRICITY IN SPASMODIC STATES.

To the Editor of the CANADA LANCET.

SIR,—I wish to offer a few remarks in reference to the article of Dr. A. M. Rosebrugh, in the last issue of the LANCET (p. 129), in so far as the same relates to the use of electricity in the treatment of spasm. The conditions of Writer's cramp and wry neck are there especially referred to, as well as spasm in general, with sundry details from leading writers as to the mode of application, etc., conveying to the reader the impression that electricity has really been proved to be a curative agent in spasmodic states.

The facts are, on the contrary, that electricity has proved a noted failure in this very class of cases; for the proof of which no better evidence can be asked than the following from J. Russell Reynolds, M.D., F.R.S., in his "Clinical Lectures on Electricity," p. 102. He says: "The forms of spasm in which electricity has been most commonly used are torticollis, a spasmodic condition of the muscles of the neck on one side; writer's cramp, and so-called histrionic spasm of the face. It is said that such cases have been cured, but my own experience has been unfortunate in regard to them. I have tried electricity again and again, in every individual form, but I have never seen it do any good. I have tried battery currents, direct and indirect; I have tried faradization weak and faradization strong, with wet sponge and dry; I have used static electricity also, and each form of electricity persistently. I have not given up because the treatment has done no good at first; but I do not know one single instance in which it ever seemed to do the smallest good." The same eminent observer, writing of chorea says: "In my judgment, the less one says in the present state of knowledge about chorea and its treatment by electricity, the better will it be for therapeutic science." (*Ib.* p. 82.)

In view of this strong testimony, the question will arise, how it is that Drs. Beard and Rockwell, and Dr. Bartholow can have been referred to so pointedly by Dr. Rosebrugh, in apparent support of a doctrine the very opposite? As regards the former, it may be said, that at the time their book was written, they were endeavouring to raise the

use of medical electricity from obscurity and even opprobrium into general favor; they entertained glowing anticipations of its future usefulness when methodically applied; and it was perhaps pardonable, if in isolated sentences, they appear to have drawn on those anticipations. But in reality they have bestowed very little commendation on the use of electricity in the treatment of spasm, and in the cases they furnish, they do not profess that a single one has really been cured by it. The few cases they have to offer were "improved" or "benefitted" etc., which might be accounted for by rest and the other concomitants of treatment. Writing of "muscular contractions" and their treatment by electricity, they say: "The prognosis is usually unfavorable for all, except the rheumatic cases."

As for Dr. Bartholow and his assertion, as stated by Dr. Rosebrugh, that "there is no fact in regard to galvanism more conspicuous than its power to allay spasms," I can do no better than quote, for the benefit of the readers of the LANCET, the estimate placed by the *N. Y. Medical Record* (September 3rd, 1881), on "our prolific author's latest production"—his treatise on electricity: "But even the student should not too implicitly rely on the positive assurance of the value of electricity in the numerous diseases for which it has been recommended. He should remember that the present book emanates from an optimist in all matters therapeutical. No one of course would to-day wish to dispute the great utility of electricity in some conditions of organic disease or functional disturbance. But one rises from the perusal of Dr. Bartholow's treatise with the conviction that the author expects rather more from electricity than would seem to be justified from well authenticated facts."

This, I think, is all that it is necessary to say in justification of the position here taken. What has appeared to render these remarks necessary is probably due to an oversight on the part of Dr. Rosebrugh, whose error, if such it be, passed muster before so astute and learned a body as the Toronto Medical Society (before whom the paper was read).

Yours, etc.,

THOMAS W. POOLE, M.D.

LINDSAY, Jan. 5, 1882.

Selected Articles.

FOUR CASES OF HEPATOTOMY.

August 15, 1880, Miss E. G., æt. 37. Between 1870 and 1872 she broke down in health, suffered from obscure symptoms of which she can now give no very clear account, but which were referred, by three practitioners, to the spine. In 1872 she consulted the late Mr. Carden, of Worcester, who diagnosed some hepatic mischief, but gave no decided opinion. In 1873 she had a severe inflammatory attack, the symptoms of which were regarded as being due to diaphragmatic pleuritis. That illness continued three weeks. Since then has never been well, suffering from bilious attacks, swollen legs and feet, dyspepsia, inability to walk and great mental depression. She asserts that the right leg has always been more swollen than the left. In 1876 her friends noticed an alteration in her size, she had to have her dress let out, her breathing became interfered with, and an enlargement on the right side became apparent. This increased slowly till 1879, when it was evident that the whole of the right chest and abdomen were enormously increased in size, but it was not till February of this year that any attempt at diagnosis seems to have been made, and the opinion then seems to have been that the enlargement was due to malignant tumor. In July she came under Dr. Pike's care, and he diagnosed it as a case of hydatids of the liver. Dr. Pike and Mr. Dawson aspirated the tumor August 11, and withdrew a few teaspoonfuls of clear serum, enough to establish the correctness of the diagnosis of multiple hydatids even though they could find no scolices in it. On the 15th I found her in such a condition that it was evident death from suffocation and exhaustion was imminent. She was propped up in bed to relieve her breathing, and was vomiting incessantly. Was extremely emaciated, had a hay-like odor of her breath, pinched features and yellow skin, and all the symptoms of extreme exhaustion. The hepatic dulness extended from the third rib down to umbilicus, crossing the middle line to the left all the way for about two inches, and much more at the lower margin. The whole of the right side was occupied by the tumor, no air was entering the right lung, the left was greatly interfered with, and the heart was pushed much over towards the left. Below the right ribs distinct fluctuation could be obtained over the tumor. I had no hesitation in proposing abdominal section. August 16, performed the operation; Dr. Pike gave ether. I made an incision four inches long and about two inches to the right of the middle line, beginning at the edge of the ribs, and inclining slightly inwards towards the umbilicus. Having carefully secured all the bleeding points, I opened the peritoneum,

and found that there was no adhesion of the liver to the wall, and that I had exposed healthy liver tissue. Into this I passed a large sized aspirator needle, and evacuated a few teaspoonfuls of clear serum. Removing the needle I passed my knife into its track, and made an opening large enough for my forefinger. I then found that the layer of liver tissue was from half an inch to three-quarters thick. I then fixed a pair of Kœberle's catch forceps on each of the margins of the wound in the liver, and asked my assistant gently to draw them up as I enlarged the incision. This I did to the extent of about three inches, and the moment I freed my finger, myriads of transparent globes of all sizes, from a pea to an orange, shot out, covered the table and floor, and were afterwards picked off the floor all over the room. When the tension was relieved, I dug them out with a large silver gravy spoon, and this process took much more time than the whole of the rest of the operation, and during its performance, Mr. Harmar most skilfully prevented any cysts entering the peritoneal cavity, by keeping the flaps of the liver close against the abdominal wound. Finally, I perceived that my gravy spoon was causing some hæmorrhage from the inside of the cavity which had no kind of lining membrane, and I had to leave a considerable quantity of cysts in the cavity. In the cut surface of the liver, two bleeding points gave me some anxiety, but I closed them temporarily with Kœberle's forceps, and finally secured them in the stitches. These I applied by a common short needle and piece of silk in the continuous method, fastening the wound in the liver, through the whole thickness of the tissue, to the wound in the abdominal wall, so as effectually to close the peritoneal cavity; I then fastened in a wide glass drainage tube eight inches long. The quantity of hydatid cysts evacuated was estimated at two gallons.

Patient rallied well and seemed to suffer nothing from shock. Her sickness ceased immediately after the operation and did not return, and her breathing became at once relieved, so that she could lie flat on her back, or on either side.

I saw her again on the 19th, without a bad symptom, eating well, entirely free from pain, and with the hepatic dulness contracted to almost normal limits. A large number of cysts had come through the tube daily with the discharge, which was finally tinged with bile. Dr. Pike washed out the cavity twice a day with weakly carbolized water. Fragments of cyst continued to come away for about a month, and now (October 17) there has been hardly any discharge at all for a fortnight, and nothing remains but a sinus.

Dr. Pike notes that one day during the syringing out of the cavity, she had a sharp, sudden pain passing round from right to left. This lasted some three or four hours, and after that about half a pint of bile was passed from the wound, and the pain gradually ceased. The patient herself writes that she feels now quite well, and is able to walk about alone, not quite eight weeks after the operation.

I have only to say that Listerian precautions had no share in the success of the operation. All their formalities were carried out with the assistance of plain cold water, and a spray of about one in a hundred, which most of the time was not on the wound. Since then I have employed water only for the spray, without carbolic acid at all, and my results have been quite as satisfactory as with Listerism.

2. J. D., æt. 56, Feb. 5, 1881. Dr. Hadley favoured me with the following notes: He saw J. D. August, 1879, when he had an attack of severe illness which was regarded as due to the passage of a gall-stone. In January, 1880, a large tumor was discovered occupying the whole of the epigastrium, right hypochondrium, and extending downwards into the right iliac region. The tumor had an indistinct fluctuation. During 1880 the patient became greatly emaciated, passed generally clay-colored stools, and frequently had his urine deeply tinged with bile. In December, 1880, the cyst seemed to find an opening into the intestine, for the tumor became greatly diminished in size, and the patient passed large quantities of brick-red fluid from the rectum. After this discharge the cavity seemed to refill in a few days, and the process was repeated at intervals. In January, 1881, the process of emptying seemed to cease, and it was proposed to tap the cyst, but on account of the presence of intestines all over the front of the tumor it was deemed more prudent to have an exploratory incision made. Feb. 6, I performed the following operation, the ether being administered. I made an incision about three inches in length over the tumor in the axis of the right rectus muscle, and about three inches to the right of the middle line, beginning about two inches above the level of the umbilicus. The peritoneum was easily reached, but there I found intestines and omentum glued everywhere over the surface of the tumor, and I had to exercise much care in dissecting them off so as to clear a part of the cyst about two square inches in area. There was, however, no adhesion between the parietal layer of peritoneum, and the subjacent intestines. I then passed my small sized trocar into the tumor and evacuated seven and a half pints of dark bilious colored fluid. When the cavity was emptied completely I enlarged the opening made by the trocar so as to admit two fingers, and came at once upon a loose mass which I removed, and which proved to be a slough of liver tissue weighing about one ounce. I then stitched the edges of the wound in the liver to those of the wound of the abdominal wall, and fixed in a glass drainage tube. The cyst was

clearly the liver itself which had been distended into a shell with apparently a pretty uniform thickness of about half an inch. The fluid removed was carefully examined by Dr. Saundby, the pathologist to the Woman's Hospital, and found to consist of nearly pure bile mixed with pus.

No effort was made to conduct the treatment upon Mr. Lister's principles. The glass drainage tube was left in for about a fortnight, and then a piece of rubber tube replaced it. The temperature and pulse curves were almost normal, patient's appetite rapidly improved, and March 30th there was very little discharge from the drainage tube, and he had gained 14 pounds in weight in seven weeks. (P.S.—He has gained 42 pounds since the operation, September 16).

3. L. B., æt. 25. She had been married four years, but had never been pregnant. Her illness began with a sudden attack of pain at the seat of the swelling, in September, 1880, and since then the tumor had steadily grown. The nature of the tumor was doubtful. It was in the position of the right kidney, was movable but had an attachment above, which suggested an origin from the liver. No distinct fluctuation could be discovered in it. February 9, I made an abdominal section, and found it to be a hydatid tumor of the liver, which had no adhesion to the abdominal wall. I opened the capsule, which consisted of a layer of liver tissue, about one-fourth of an inch in thickness, and scooped out the hydatids with a dessert spoon. They were of various sizes, from a pea to a small orange, and amounted in all probably to a pint and a half or two pints. I was very careful to cleanse out the deep cavity in the liver very thoroughly, and Mr. Harmar very skilfully kept the edge of the hepatic wound up out of the abdomen, so that none of the parasites escaped into the peritoneum. The wound in the liver was stitched to the wound in the abdominal wall, and a glass drainage tube was fastened in. The after progress of the case was uninterrupted recovery, no effort being made to conduct its treatment on Mr. Lister's principles.

4. E. P., æt. 21, unmarried, August last, for an abdominal tumor. This I recognized at once to be an enlargement of the liver, and unhesitatingly made a diagnosis of hydatid disease. Her illness began in April, 1880, with an attack of violent bilious sickness, followed by pain in back, and right side. The enlargement was noticed within six weeks, and had steadily increased. Suffered from repeated attacks of violent bilious vomiting. The hepatic dulness extended from the fourth rib down to an inch below the level of the umbilicus, and from the spine round to four inches across the middle line in front, and distinct fluctuation could be felt in the tumor below the ribs. I kept the case under observation from August to February, during which period she increased two and a half inches in girth over the lower ribs, and fell off markedly in health. The question lay between aspiration and hepatotomy, and this could be decided only by our being able to recognize which of the two varieties of hydatid disease my patient suffered from. No indication of this could be obtained, and having a growing distrust in aspiration for abdominal surgery, and an increasing confidence in abdominal section, I proceeded similarly as was done in the other cases. It turned out to be a large monocystic hydatid. The thickness of liver tissue through which I passed was nearly an inch, and I had a little trouble with hæmorrhage, which was, however, completely controlled by pressure. I fixed in a wire drainage tube after having united the edges of the two wounds, and replaced it by a soft rubber tube at the end of a fortnight. This latter tube I finally removed April 13th, and on the 19th the wound was almost healed, the patient was getting about, eating well, and rapidly gaining strength. Possibly in this case it might have been better to have tried aspiration first, and that may be the opinion of some. I do not agree with this however, and I see no reason to regret my action. I am growing more and more satisfied that all such cases will be best treated by abdominal section. (P.S.—This patient also is now in perfect health. I have operated upon three other cases of hydatids of the liver, in exactly the same way, and all have done well, September 16, 1881).—Lawson Tait, M.D., *Birm. Med. Rev.*—*N. Y. Med. Abs.*

PRACTICAL OBSERVATIONS ON OVARIOTOMY.

BY DONALD MACLEAN, M.D., ANN ARBOR, MICH.

Having for some years past devoted a good deal of attention to the subject of ovariotomy, I had much pleasure in meeting with Dr. Thomas Keith of Edinburgh last year, and in seeing him operate on several cases, and I have to acknowledge my indebtedness to that distinguished surgeon for numerous valuable suggestions which I have since adopted in my practice and which I am desirous of communicating for the benefit of others. Within a period of nine months I have performed ten ovariotomies and previous to that time I had done sixteen. Of the last ten cases, ten recovered. In the management of these ten cases I have to some extent tested several of Dr. Keith's methods and appliances and am convinced of their great value.

First of all I desire to say that in my opinion the operation in question requires for its successful performance so much surgical experience and dexterity, such carefully arranged surroundings, so

many appliances and such perfect preparations in all respects, that its practice should be confined to a comparatively limited number of surgeons who should be in the truest and best sense of the term *specialists*. Of late years I am sure that the operation has been notoriously abused in this and other states. It would be an easy matter to collate a long list of unpublished cases operated upon under circumstances which rendered success an exceedingly remote possibility, and in which, as a matter of fact, the rate of mortality is almost one hundred per cent. Unless a surgeon is so situated as to give him points of experience, surroundings and equipments, special advantages for performing ovariotomy, justice to all concerned, demands that he should refrain from recklessly attempting to gratify his personal ambition at so great a risk to his patient's life.

The remarkable success of certain celebrated ovariotomists, has been attributed to the cautious manner in which they have selected their cases, declining to operate whenever the difficulties and complications of the case have seemed to endanger the chances of success. My own conviction is, that the care and thoroughness with which they prepare themselves and their patients, in each and every instance, furnish the true explanation of their success, and I am sure that their example has not been followed as universally as it ought to have been. The practical points which I wish to refer to more particularly at present are the following:

(1) The anæsthetic and its mode of administration; (2) Antiseptics; (3) Treatment of the pedicle; (4) Management of adhesions; (5) Drainage of the peritoneal cavity.

(1) *The Anæsthetic.*—In common with Dr. Keith and others I have generally used ether in this operation, but in my latter cases, chloroform. By the use of a very simple apparatus, I believe that chloroform may be used in ovariotomy and in all other operations with as much safety and satisfaction as any other anæsthetic. This apparatus consists of two parts: (1) an inhaler made by stitching a piece of canton flannel over a wire frame which fits like a small tent over the patient's nose and mouth; (2) a dropper which consists of a two-ounce bottle with a perforated cork and two metal tubes, one of which merely admits air to the bottle, while the other permits the chloroform to escape drop by drop. By this means I believe that the greatest degree of safety is secured as well as the utmost economy of chloroform.

(2) *Antiseptics.*—In the cases of ovariotomy which I saw Dr. Keith perform he used all the Listerian antiseptic appliances. I could see, however, that he was beginning to doubt as to its expediency. He assured me that he had seen patients die with "brutal haste" from carbolic acid poisoning, and I believe that I can say the same myself. Since then (as is now well known), he has laid carbolic acid aside to a large extent, if not entirely, and prefers to trust to the careful arrest of hemorrhage and the thorough drainage of the peritoneal cavity. My own limited experience hardly justifies me in expressing a decided opinion on this important point, but, unless there are special reasons for doing so, I shall not hereafter resort to the use of the carbolic acid spray, against which several serious objections have been justly urged. My belief is that by exercising due care in arresting hemorrhage, sponging out the peritoneal cavity till it is absolutely dry, and in making provision for the escape of effused fluids, the danger of septicæmia is sufficiently provided against. Blood poisoning has occurred in spite of all antiseptic precautions, and it has been escaped in cases not treated antiseptically, and in which the circumstances seemed highly favorable to its development.

(3) *Management of the Pedicle.*—In my sixteen cases I had transfixed the pedicle with a double ligature and tied it in two halves, cutting the ligatures off short and dropping the pedicle into the pelvis. So far as I know, this method of treating the pedicle proved satisfactory. I have never seen any bad results follow from this source. Nevertheless, Dr. Keith's method has seemed to me to be, although somewhat slower, still on the whole, much more safe and satisfactory. He first of all seizes the pedicle in one or two pairs of strong forceps with a catch in the handle. If the pedicle is narrow, one pair; if broad, two; so that the vessels are safely controlled for the time. He then cuts away the tumor, and applies his clamp to the pedicle on the cardiac side of the forceps, which latter he then removes, leaving at least one and a half inches of the pedicle projecting beyond the clamp. To this projecting part of the pedicle the actual cautery is applied in the form of a solid mass of iron at a black heat, which slowly sears and shrivels up the tissues of the pedicle. This part of the procedure is conducted with the utmost care and deliberation, and is sometimes the longgest part of the whole operation. The clamp is formed of two solid metallic bars furnished with a screw by which they are made to compress the pedicle with great tightness. There are also two wooden handles to the clamp by which the surgeon holds it in his left hand while he applies the cautery with his right. During this part of the operation the peritoneal cavity is filled with soft sponges, and the edges of the wound are held in apposition by the hands of an assistant. Between the abdominal wall and the lower surface of the clamp, a pad of wet cloth is placed to ensure its thorough protection from the action of the cautery. The pedicle is gradually shrivelled up and the debris wiped away until all of the pedicle external to the clamp is disposed of. The latter is then unscrewed and removed while the surgeon takes

care to retain control of the remainder of the pedicle until he has carefully examined it and satisfied himself that there is no tendency to bleeding. If there is any doubt on the point, the pedicle should be transfixed and securely tied, either with strong catgut or a silk ligature. All danger of hemorrhage being in one way or the other guarded against, the pedicle is permitted to subside into the pelvic cavity.

(4) *Treatment of Adhesions.*—The only point I wish to note on this part of the subject is the vital importance of securing every point that shows the slightest inclination to bleed. Much patience and perseverance are sometimes required for this part of the operation, but it is impossible to overestimate its urgent necessity. The best ligatures to use, in this situation, are those made of carbolized catgut. They are, of course, cut off close to the knot.

(5) *Drainage of the Peritoneal Cavity.*—The only method of drainage now resorted to is that by means of a glass tube, the lower end of which rests in the Douglas cul de sac, while the other projects through the lower end of the wound in the abdominal wall. The drainage tube may often be dispensed with, and the operator will always be glad to omit its use when he feels that he can do so with safety. In cases where there is any prospect of extensive effusion, especially if there is any reason to fear oozing of blood, the drainage tube is *indispensable.* It was first used by the late Professor Peaslee, but at least one fundamental alteration has recently been made in his method of using it. Peaslee kept a plug of carbolized cotton in the mouth of the tube, and he removed this from time to time and allowed the accumulated effusions to escape. Now, the effusions are not permitted to accumulate, the mouth of the tube is always kept free and the effusions are provided for by the application of a large, soft carbolized sponge over the end of the tube. The sponge is enveloped in a sheet of rubber cloth which has a hole in its centre through which the end of the drainage tube projects. The fluids are thus caught in the sponge, and at stated intervals the nurse unfolds the rubber sheeting and replaces the saturated sponge with a clean one. In this way the fluids are got rid of as soon as secreted, and at the same time their quality and constitution afford valuable information to the surgeon. Just as soon as all appearance of effusion has ceased the tube may be removed and the opening closed with a hare-lip suture. This will sometime occur as early as the fourth or fifth day. If the discharge from the tube presents any sign of becoming purulent, the peritoneal cavity may be washed out with a weak solution of carbolic acid and common salt; a drop or two of the former and five grains of the latter to a pint of water at a temperature of 100° Fahrenheit. This is an expedient which in my experience never fails to afford material relief and comfort to the patient.—(*Physician and Surgeon*).

RARE COMPLICATIONS AND SEQUELÆ OF TYPHOID FEVER.

The Boston Med. Journal of Dec. 15th, contains the following interesting clinic by Dr. Da Costa, of Philadelphia.

I will to-day group together for you a series of cases of typhoid fever, which show a few rare complications and sequelæ. Perhaps some of the peculiarities of this affection may be best illustrated by the following specimens taken from a case that perished during the height of the disease:—

CLINICAL HISTORY AND MORBID ANATOMY OF TYPHOID; EXAMINATION OF THE HEART.

These specimens were taken from the body of a man who died in the wards a few days since of typhoid fever. His case was looked upon as hopeless from the beginning, for reasons which the autopsy has fully demonstrated to have been correct. His name was James Y., born in England, thirty-nine years of age; he was admitted into the hospital on the fourth of this month with diarrhœa. The record states that he had then been ill for nearly a month. He was a machinist, and had only been in this country a few months. At the beginning of his illness, it is said, that there had been no chill, the onset of the fever was gradual, but diarrhœa was a prominent symptom; he also had bilious vomiting, frequent epistaxis, and severe headache. Upon admission he had a dry cough, fever, and diarrhœa, his stools were thin, yellow, and frequent, so frequent that he had ten during the first day. From the first he had been troubled with a symptom which always makes one solicitous about a case,—he could not sleep; his temperature was 104 6° F.; the pulse was, however, only beating 80 in the minute; it was compressible and very weak. Upon examining his chest, we found slight dulness existing beneath the angle of each scapula. There was a good deal of hypostatic congestion in both lungs posteriorly, with coarse rales very generally distributed. But what struck us most forcibly, and what indeed made us think the case one of the greatest gravity, and most likely to prove fatal, was the state of the heart, the sounds were muffled, the first was only with difficulty detected; every now and then, about every second or third beat, there was a most marked intermission.

In consequence of his general condition and weak heart he was at once placed on stimulants, at first wine, subsequently whiskey, gradually increased to twelve ounces in twenty-four hours, with four ounces of sherry wine. He was also

steadily given strychnia, one sixtieth of a grain three times a day, in view of the fact that the great danger was going to be a failure in the action of the heart. This proved to be true; for while he remained weak, and was suffering with restlessness, delirium and tremor, the gravity of the symptoms was not so much due to the effect upon the nervous system of the typhoid fever poison, nor to the state of the bowels,—for the diarrhœa was readily kept in check with mineral acids and a little opium, in the form of suppositories,—as to the weak and irregular action of the heart, which indicated grave disorder of the walls of the heart. Towards the end it became somewhat more regular, but it remained weak. I ought to state, also, that about five days before death there was a slight but not excessive epistaxis. The temperature all the time remained high, and on the day before death was 105° F. I will now invite your attention to the specimens.

Let us first confirm the diagnosis of typhoid fever by examining the intestines. Here is the cæcum, here the ileo-cæcal valve. Besides the great ulceration of Peyer's patches, these solitary follicles are in the same condition. Passing up the bowel, we find patches infiltrated, and with only superficial erosion, a condition not incompatible with recovery; others more affected are ready to slough away. The kidneys are large, somewhat fatty. There had been no albumen in the urine during life, and this fatty condition must be looked upon as due to a cause antecedent to the occurrence of the fever; it is not the form of renal degeneration which is often found in typhoid. Look at the spleen. As the intestinal ulcers were characteristic, so this spleen is characteristic. It is very large and full of blood, weighing twenty-five ounces; it constitutes a lesion almost as essential as that we have just seen in the bowel. This is the large dark spleen of typhoid fever, the currant-jelly spleen. The lungs show very marked evidence of hypostatic congestion at the posterio-inferior portions, but there is no true pneumonia; the tissues crepitates, it is not infiltrated to the extent of consolidation, but simply engorged with blood, the congestion we recognized during life. The liver also very large, weighs sixty-four ounces, at least fourteen ounces more than normal, it is dark-colored and exudes dark blood on section. The heart is fatty, the walls distinctly so. The leaflets of the tricuspid valve are healthy; those of the mitral valve are slightly thickened, especially at their free border, but were not sufficiently affected to permit mitral regurgitation during life. Now why did this man die? I believe it was from the fatty heart. Of course it was a hard case in itself, the temperature indicated that; it was, you recall the record, 104° F. to 105° F. The marked nervous symptoms also, which he presented,—the tremors, depression, and sinking down in bed, always indicate gravity; but with the condition of the heart these made the prognosis especially bad. There can be no reasonable doubt about one feature in the history, although the man was unable to give a full account of himself, yet the fact I refer to is confirmed by these appearances, the man had been very intemperate. The liver and kidneys show the intemperate habits of the individual. The same cause may have had much to do with the weakness of the heart, and the degenerative condition of its walls.

REMARKS ON SLOW PULSE IN TYPHOID.

Before passing to the next case I will make some remarks upon one of the prominent clinical features of the disease, which the case will bring to your mind—the slow pulse. I have said that the pulse was only eighty when he was admitted, although the temperature was 104.6° F. I have also told you that it was intermittent. Now, gentlemen, look at the disproportion between the pulse and temperature, 80 and 104° F. Is this a good or bad sign? It is a bad sign. A slow pulse is not of itself of grave import in typhoid fever, for the case may be a very light one; but when the thermometer indicates a high temperature, then a slow pulse indicates danger. This is so true that when I find the disproportion existing between the pulse and temperature I know that I have so grave a case that in the vast majority of instances the patient will die. You may ask again, What is this slow pulse owing to? and why the irregular pulse? I attribute them in part to a peculiar influence of the typhoid fever poison; but largely to this,—it was acting upon a weak and fatty heart. It is a curious fact in fatty heart that in acute diseases, instead of becoming more frequent in its action, it becomes often slower. This is not an isolated case in my experience. I have known it to occur in pericarditis and other acute maladies. Therefore, a slow pulse in this case had to do with a condition of the heart which in itself is a cause of great danger.

But I should be giving you a wrong impression, if you have been led to infer, that in every case of slow heart, in typhoid fever, be it regular or irregular, this is the effect of a degeneration of that organ. That would be incorrect. I recall a case which I saw a few weeks ago, in a young man, too young to have fatty heart, where there was no question of intemperance, for he was perfectly free from bad habits; his pulse was 80, his temperature from 104° F. to 105° F., but the heart was not irregular as it was here. The slow pulse in the case I refer to was, therefore, not due to a fatty heart nor to any fault of the ventricular walls or valves, but to some peculiarity in the poison which prevented the heart from rising coincidently with the temperature. The case, after a long and desperate illness, proved fatal. Whatever be the ex-

planation, a slow pulse and a high temperature are among the most dangerous combination of symptoms of typhoid fever.

You will also be interested to learn—and I will now only call your attention to the fact, intending to return to it—that this man had epistaxis again only a few days before his death. Another case will furnish me with a better illustration to speak of this symptom.

A CASE WITH RECURRING EPISTAXIS AND PAROTID SWELLING.

I shall now show you a case of typhoid fever with most unusual complications, and one in which I have instituted a treatment, which has been followed by considerable success. This man has been in the hospital for seventeen days. His name is Emil B., twenty-seven years of age, a cooper; he is a German. He came into the wards a very ill man, having been sick for four weeks before admission with diarrhœa and weakness. He had headache, with a furred tongue, and vomiting, and yellow conjunctivæ, indeed, there had been what is roughly and loosely sometimes called "a bilious complication" in the case, but this was all over before we saw him. He also had epistaxis, which from his history had been very free and frequently repeated; in truth it was stated that he bled at the nose every morning for a while.

Upon admission the man was found to have typhoid fever, he was very pale, weak, and feverish, the thermometer indicating 104° F., his pulse was 120 in the minute. He had frequent but not exhausting diarrhœa. He was so weak that we placed him promptly upon stimulants and quinine; and for the restlessness which he exhibited, he was ordered an ice-cap, to be kept upon his head. The looseness of the bowels was quite marked, but what is of more importance, he lost control of his sphincters, and the copious frequent discharges were passed involuntarily so that it was difficult to ascertain the number of passages. Not to detail the features of this grave case besides the frequent pulse, high temperature, and diarrhœa, I will say, in brief, that the looseness of the bowels was kept in check with opium, the restlessness was also relieved by this agent aided by the ice; and with steady nourishment, and twelve ounces of whiskey daily, the man rallied, and what seemed a very bad case soon showed great improvement. How bad a case it was you may judge from the temperature chart. Here it is; 105° F. the first night, 105° F. the next, then 103° F., and after that gradually declining to 101.5° F.; then, suddenly, up shoots the temperature again and becomes 104° F., and this rise of which I am speaking, is found to be coincident with just the complication for which I wish to show you the case this morning. Look at it, or at least look at what remains to-day, for enough remains to identify it. See this dense parotid gland forming a considerable tumor on the left side at the angle of the jaw. This is a parotid swelling or a parotitis occurring as a complication of typhoid fever, and limited to one, for on the right side there has never been any such affection.

TREATMENT OF SWOLLEN PAROTID IN TYPHOID FEVER.

Now, gentlemen, this man, who was doing very well, when this swelling appeared seemed very ill, and the whole aspect of the case became more threatening; for this occurrence is one of considerable gravity. I will not dwell upon its pathology at present, but at once call your attention to the treatment instituted, a treatment which I have, in at least one case in this hospital, previously known to produce a remarkable result. It is the steady application of ice to the swollen gland. Mark you, the usual termination of this glandular inflammation in low fevers is profuse suppuration, long continued discharge of unhealthy pus, and a pyæmic condition; the state of the patient becoming more and more grave until he perishes from blood-poisoning or exhaustion. I have tried before now all methods of treatment, painting with iodine, the application of blisters, hot poultices, only to give them up as valueless. It then occurred to me that the steady local application of ice at the beginning might prevent this suppuration and the consequent exhaustion. We resorted to it as in the previous case, and the result was admirable. The swelling became less within twenty-four hours; the tenderness also was not so marked, the general condition much better. This was continued for several days with steady improvement. Yesterday, the resident physician, perhaps too soon, believing that the swelling was reduced and the inflammation over, suspended the ice treatment. Moreover, you observe that the temperature had gone down before that time from the effect of the ice, which acted as a general sedative. There was good reason then for interrupting the treatment, but what was the result? He has more swelling this morning. But we have not lost the good accomplished by the ice, merely the benefit of its continued use. There is no suppuration, the gland is hard, and tender, the surface red. I will resume the treatment, and unless I am very much mistaken, I shall be able to show you the case at our next meeting entirely free from this complication.

His pulse is now good, not over 100; his general condition decidedly improved; the bowels are under control, but still require looking after; he is having three or four stools a day, when too frequent he is given an opium suppository from time to time; he has more strength than before; his tongue is cleaner; the mental condition has been improving. Therefore the group of symptoms which were at first so marked are now in abeyance. Notwithstanding that this glandular swelling is

looked upon as a bad complication, I am disposed to continue his treatment for a few days longer; then if the condition is favorable, I will abandon it, and apply iodine. He now is taking tincture of iron, twenty drops four times daily, and eight grains of quinine, twelve ounces of whiskey (half ounce every two hours in milk) through the day, keeping the bowels in check with a little opium by the mouth or in a suppository, given as may be necessary. The man made an excellent recovery. Towards the end a slight amount of purulent discharge was evacuated from above the angle of the jaw, where the ice had not been well applied.

The complication I have shown you here is one of the very rare ones in typhoid fever. I have seen it very often in what is called typho-malarial fever,—that is to say for the most part typhoid fever with malarial complications.

PATHOLOGY OF TYPHOID PAROTITIS.

I am speaking from a large experience with the disease when I say that it is also not uncommon in typhus, but in typhoid it belongs to the rarest of its complications. I have told you already that its tendency is to suppuration, which makes the condition of the patient much graver. But, gentlemen, unless the size of the swollen gland is reduced by resolution, it is better for it to suppurate than to remain enormously enlarged. I remember a case of typhus fever where it was necessary to resort to tracheotomy to prevent suffocation from the mechanical pressure exerted by the mass upon the trachea. If it be found impossible to prevent suppuration with ice, then the next best thing would be, I say, to encourage free discharge to prevent burrowing and pressnre upon the air-passages. I have spoken of its rarity, now what is the cause of this complication? It is an expression of blood-poisoning. It belongs to certain low forms of fever in which the blood becomes profoundly altered, and the wonder is that it is not more frequent in typhoid fever than it is. It results, moreover, not only from a septicæmic condition, but also in the pyæmic state, which is more often seen in surgical than medical cases. In the latter condition it always indicates great gravity. I have not conversed with surgeons upon this ice treatment of gland swellings in pyæmia to prevent suppuration, but will suggest it, as it may prevent an additional drain upon the system. I believe it deserving of further trial.

SOME UNUSUAL SEQUELÆ OF TYPHOID.

We are dealing this morning with bad cases and rare complications. I now show you another typhoid fever patient, who has been very ill, and could not be brought into your presence before; he is now improving so that I can show him without any risk to himself. I will, however, proceed at once to examine him so as not to detain him in the clinic-room; I will then make some remarks upon the case.

His name is Martin M., twenty-one years of age, of Irish extraction. You see he is very pale, frightfully anæmic; his mind is now perfectly clear; he passes out his tongue when told; it is not very much coated, you are, perhaps, struck more with his pallor than with anything else; his pulse is feeble, and beats 110 in the minute, it has always been about 120; his bowels are now regularly moved once a day, or sometimes only every second day; he has no tenderness in the iliac fossa nor indeed anywhere in the abdomen.

MILK LEG IN TYPHOID.

But now comes one of the symptoms which made this so serious a case, and of which you will see sufficient evidence remaining to identify the clinical history. He has had milk leg of very bad character, a phlegmasia alba dolens. Look at it. Although the leg is markedly diminished from what it was, you will still see that the right leg is considerably more swollen than the left. It has been still more swollen and very tender on pressure; the pain on pressure now has also subsided, except immediately along the course of the saphena vein, which is large and of cord-like density.

PURPURA DURING TYPHOID.

This swollen leg has been one of the symptoms from which this poor man has been suffering, now happily declining; it was associated for a time with considerable pain in the thigh and in the calf of the leg, but he has also had something else. Look at this left leg. Just above the ankle and on the dorsum of the foot see the large petechial spots, dark blotches, now only seen in this situation, but about a week ago they were all over the body, large purple and black spots in the skin, which have now almost all disappeared.

There is another point to which I will call your attention, and then will let him go out. In addition this man's life was almost ebbing away by profuse and repeated bleedings from the nose, so much so that the only means we could employ to stop them was plugging the nose, which finally arrested the hæmorrhage, which not only gushed from his nose but passed into the pharynx, and was swallowed, and afterwards vomited. This is a case of recurring epistaxis late in the disease. It was subsequent to these attacks of bleeding that these spots appeared all over the body, although a few had been observed before.

These are principal features of the case. I will now only make an examination of his heart. I tell you that there is no valvulvar disease; the first sound is still feeble and laboring, the second is clear; a systolic blood murmur is heard at the right base as well as at the left, but more at the right. There is also a certain amount of bronchitis, for a number of mucous rales are heard in the lungs. This completes our examination of this unpromising case, and he can be removed to the ward.

TEMPERATURE RECORD DURING OCCURRENCE OF SEQUELÆ.

Let us now study his temperature record. His temperature this morning is normal. I will now show you some of the most interesting temperature sheets [Each sheet contains the record for four weeks. REP.] it is possible to see. Look at this last one, see the enormous variations during the last two weeks, now down to 98° F. then shooting up to 105° F. This is not the course of typhoid fever temperature. Look at it; it begins at the end of the second temperature sheet, and here it is at its maximum. Now, the interesting part to us is that these temperature variations were accompanied by chills which were not influenced by quinine, and these temperature rises corresponded with attacks of epistaxis; during the last two instances this was noticed certainly.

This is not the temperature record of typhoid fever, certainly not the typhoid record of a man ill with typhoid, who has been in the hospital for eight weeks, and who has been sick at least nine weeks. It is, therefore, the record of these strange complications from which the unfortunate has been suffering. Milk leg, epistaxis, profound alterations in the blood, petechiæ, and chills, the latter uninfluenced by quinine. What does it mean? It means that this man has been pyæmic. There has been septicæmia, milk leg, finally a pyæmic condition of the blood induced by the phlebitis, as shown by these irregular chills.

REMARKS ON EPISTAXIS.

This altered condition of the blood, which gave rise to this anæmia, was also the cause of the recurring epistaxis. Now, late epistaxis in typhoid fever as compared with early epistaxis is relatively very rare; it almost never occurs, although you have seen in this clinic to-day two marked cases which apparently prove the contrary. In the other case the epistaxis occurred within two or three days before death, but in this man it came on in the seventh or eighth week, when his life was threatened by the petechiæ (purpura hæmorrhagica). Gentlemen, epistaxis, as the rule, is an early symptom of typhoid fever, occurring prior to the decided development of the fever, or in the first week. Here you have had an illustration of how it may happen as a late complication, but when late it is a most dangerous one.

The treatment for the epistaxis, ergot, iron, locally and internally, was unsuccessful, until we finally resorted to the plugging of the nostril.

BLOOD CHANGES IN LOW FEVERS.

Finally, before dismissing this much-complicated case, I must say a word about the petechiæ. Do petechiæ belong to the clinical history of typhoid fever? Gentlemen, you may pass through a lifetime without being able to duplicate this case. These extravasations you will see in typhus or in cerebro-spinal fever, but they are most rare in typhoid. They bespeak a condition of blood that is serious in its results, a state of dissolution to an extreme degree, occurring very late in the disease. I have seen this also in typho-malarial fever—which is still typhoid—as it occurred in the army in soldiers who had acquired the so-called Chickahominy fever; among those who were thus brought to Philadelphia I remember a number had petechiæ.

PROGNOSIS OF CASE.

These are some of the leading clinical features, complications, and sequelæ of typhoid fever under rare conditions. This man has passed through a severe ordeal, but I believe that he will rally, and if we can get his blood in better condition I think we may now look for recovery. His temperature is once more normal, the milk leg is passing away, the chills no longer occur, nor the attendant phenomena that bespeak a condition of pyæmia from which he was once laboring.

His treatment now is fifteen drops of the tincture of the chloride of iron, with five of muriatic acid, which, formerly taken thrice daily, we will increase to four times a day. He also gets five grains of quinine each morning.

His chances are now fairly good; a week ago you would not have thought he had a chance. There were no difficulties of diagnosis here; the early symptoms of typhoid fever were marked, very marked; it was always a bad case. We found before the peculiar sequelæ appeared, that there had been also a strong history of syphilis, although there were not any strong syphilitic manifestations. I mention this because it belongs to the clinical history, not because it had any especial influence upon the course of the disease.

CARDIAC HYPERTROPHY AND RENAL DISEASE.

The problem of the subordination of cardiac hypertrophy to renal disease, when the two co-exist, to which so much discussion has been lately devoted, has engaged the attention of M. Straus of Paris, who has published in the *Gazette Médicale* a preliminary account of his experimental results. The difficulties of the problem of the relation of the heart to the kidney lesion depend upon the complexity of the morbid conditions present in the system. These are much simplified in an experimental inquiry, although the results thus obtained have not always been very decisive. It is difficult to preserve for long the life of animals after a lesion of both kidneys, and Straus has therefore contented himself with causing atrophy of one kidney by ligature of the ureter. Previous experiments of the same kind have yielded contra-

dictory results. Simon, Rosenstein, and Gadden observed no cardiac consequence; Beckmann, Grawitz and Israel, and Lewinsky found a resulting hypertrophy of the left ventricle. The experiments of Straus were made on twenty guinea-pigs, which were killed from four to six months after the operation. A pure hypertrophy of the left ventricle was found to be the invariable result. The average weight of the heart, for instance, in three cases was 2·76 grammes, while that of three healthy animals was only 2·25 grammes, and this although the average weight of the guinea-pigs operated upon was two hundred grammes less than that of those selected for comparison. The hypertrophy was uncomplicated by any degeneration of the muscular substance of the heart, and was apparently the direct result of the atrophy of the kidney, since the arterioles in various parts were examined and found to be healthy. Grawitz and Israel asserted that although cardiac hypertrophy might follow a renal lesion in old animals in which the other kidney did not sufficiently overgrow to compensate for the loss, this result was not to be obtained in young animals. This statement is disposed of by the experiments of Straus, since nearly all the guinea-pigs he experimented upon were young. Moreover, he was unable to observe any inverse relation between the degree of hypertrophy in the heart and kidney, such as should obtain if the conclusions of Grawitz and Israel were correct. In one of the cases in which the increase in weight of the heart was greatest, the remaining kidney had increased to at least double the normal weight. An objection which is often urged against the dependence of cardiac hypertrophy on renal disease is the absence of such hypertrophy in cases in which the kidney suffers in consequence of an affection of the urinary passages. But Straus relates, to show that hypertrophy may be found in these forms, two cases of women dying from uterine cancer which had compressed the ureters, and had caused dilatation of the pelves of the kidneys and very marked renal lesions. In each there was considerable hypertrophy of the heart without any valvular lesion. In a discussion on this paper at the Société de Biologie an interesting and apposite case was related by Quinquand. A man twenty-eight years of age was shot in the left lumbar region, and recovered after an illness attended with hæmaturia. At this time there was no hypertrophy of the heart, but distinct evidence of this was discovered two years afterwards. He died with symptoms of uræmia four years later. The left kidney contained an old abscess, the right was hypertrophied, and the heart was increased in weight to eighteen ounces in consequence of hypertrophy of the left ventricle. All the liquids of the body were found to contain a large excess of urea.—*The Lancet.*

Removal of the Uterus for Cancer.—The November number of the *New York Medical Journal and Obstetrical Review* contains a "special article" by Dr. Andrew F. Currier, of New York, in which the various methods of removing the entire uterus for cancer, as practiced by Freund, Schröder, Czerny, and others, are reviewed, as well as the general question of the advisability of removing the organ. He thinks the advantages of the vaginal method over that of Freund (by laparotomy) are enormous—there is but one section of the peritomeum, the intestines are unharmed, there is a better opportunity to discover diseased tissue, which is most likely to be situated in the vicinity of the cervix, and, most important of all, the patients often survive, which is rare by Freund's method. But most patients are not likely to be benefitted by either of these serious operations; the most hopeful cases will be those in which the patients are warned of their danger in the early stages of the disease, and in such cases Schröder's supra-vaginal excision of the entire cervix is most likely to prove of service. This operation, while not so radical as removal of the entire organ, and hence not so efficient in cases involving the tissues above the internal os, is far less grave, and is, besides, more thorough than amputation of the cervix as it has ordinarily been done in the past. In those rare cases, however, in which the body of the uterus alone is involved, there is no alternative to laparotomy, either by Freund's operation or by some modification of it. As to drainage—a most important item in such cases—a perfect system seems impossible, but Bardenheuer's, although in the hands of others it has not fulfilled its author's expectations, affords as good results as any yet devised. As to the broad question of whether cancer of the uterus, and so cancer in general, can be radically cured, the author thinks the logic of events points to its approaching solution.

Obstetrical Experiences. — Dr. David M. Williams, of Liverpool, in an abstract of 2,500 confinements, "chiefly among the comfortable middle classes," states that he considers the forceps a great boon, always to be used with comfort and safety, without injury to the mother, and in only one case did he find craniotomy necessary. For over twenty years he has introduced the forceps into the uterus, often saving the child by that means, when the os was very narrow, but dilatable. He had only employed chloroform in the first stage to overcome rigidity; in the second stage he often administered it till complete unconsciousness was produced, believing that the perinæum may thus be frequently saved from rupture, an accident which will sometimes occur after every precaution. He has cured a complete rent, involving the spincter, without operation, by rest, local cleanliness, and the induction of temporary constipation by opium. He trusts in ergot especially as a pre-

ventive of flooding in cases where the pains are weak and the intervals long. He denies, on the evidence of distinguished travellers contrasted with the records of contemporary British practitioners, that puerperal mortality is the result of civilization. The truth is quite the other way, and by acting on increased knowledge, more lives will yet be saved. —*British Medical Journal.*

Fungoid Origin of Diphtheria.—Dr. Michael Taylor, of Penrith, in recording an isolated outbreak of diphtheria, expresses his belief in the influence of dampness as an exciting cause, and in the connection with that disease of certain fungi associated with dampness. Three children, living in the same house and occupying the same bedroom, were all seized with diphtheria last August, in a district then free from any epidemic. The house was very healthy until the water-spouting of its roof got out of order. A great rainfall in July caused one wall of the bed-room to become saturated, through leakage of the spouting, the paper on the wall facing a passage, between the apartment and a second bed-room, became sodden and separated from the plaster, and small clusters of a toadstool (*Coprinus*) grew on the wall, as well as a fine thready bluish mould. The drainage of the house and its drinking-water supply were very good. Excepting near the damaged spouts, the house was dry; and it is remarkable that the three children slept several weeks in their warm cribs in the damp room without suffering in any way, and it was not until the fungi appeared that they were attacked with true diphtheria. This is in accordance with Professor Laycock's theory, that diphtheria depends on *Oidium*, or potato-fungus, for although in Dr. Taylor's case another vegetation was in question, there is fair reason to believe that the sporules of many kinds of fungus may not merely irritate, but directly infect the mucous membrane of the throat.—*British Medical Journal.*

Nerve stretching for Locomotor Ataxy.—Dr. Charlton Bastian has recently delivered a clinical lecture, at University College, on a marked case of locomotor ataxy, the symptoms of which he described very minutely. The patient was about forty years old, there was wasting of the muscles of the extremities, especially in the left leg and thigh; at length the movements of his legs became slow and jerky, after walking a few yards he would become exhausted and his legs would double up under him. Mr. Marshall cut down on the great sciatic nerve on the middle third of the right thigh and stretched it with his finger, pulling it twice upwards from below, thence twice downwards from above; antiseptic precautions were employed. About five weeks later, the right lower limb having markedly improved, whilst the left remained as it was before the right sciatic nerve had been stretched, Mr. Marshall operated on the left sciatic in the same manner. Troublesome diarrhœa followed, but seven weeks later when the patient tried to walk, his gait was found to be much better, and tactile sensibility, previously impaired in the lower extremities, had become perfect. The first operation was followed, in seven days, by the disappearance of a constant aching pain in the hypogastrium, which did not return, though slight pain was felt in the lower part of the chest. In a less advanced case treated in the same manner the improvement was but slight. The wounds in these cases were slow to heal. Dr. Bastian does not attempt to explain the mode in which nerve-stretching acts, but if it is found to do good, it should be practised. The manner by which many drugs act specifically on many morbid processes is quite unknown, yet that is no reason for not continuing their use when they are known to be beneficial in disease, and the same principle now applies to nerve-stretching.—*British Medical Journal.*

Prolapse of the Bladder, and Rupture of the Perinæum.—Lena P., twenty-six years old, and a native of Germany. She has been married eight years, and has had three children, but no miscarriages. The last child was born six months ago.

How long have you been sick, Mrs. P.? "Six months." Have you never been well since the birth of your last child? "Yes, I feel well sometimes, but I cannot do my work any longer." Why cannot you do your work? "Ever since my baby was born my womb keeps coming down outside of my body, and prevents me from working as I used to."

Here, you see, we have a diagnosis given us at once, but, as is very apt to be the case under such circumstances, it is not correct. The uterus, I find, has never been down at all.

What else troubles you? "Pain in the back and great distress in the lower part of my stomach." Do you suffer from anything else? "I feel just like fainting sometimes, because I am so very weak." Have you any trouble with your bladder? "No, but I notice that when I pass my water the womb always goes up, though it comes down again afterwards." Do you have to get up at night to pass your water? "No."

From the appearauce presented when I first looked at the vulva of this patient, I supposed that the uterus was in reality out of the body, as she stated; but as soon as I touched the supposed uterus with my finger, I found that the mass yielded, and that instead of having prolapsus uteri to deal with, there was prolapsus of the anterior wall of the vagina with prolapsus of the bladder as well. In addition, the examination revealed that the patient had also lost her perineum; and hence

it is that the bladder, having been deprived of its normal support, has fallen down in this way, until it is practically entirely out of the body.

But what gives all this pain in the back and the great distress of which the patient speaks? In pursuing my investigation of the case I found, furthermore, that the uterus was completely retroflexed; the cervix being felt very high up, and the fundus down behind it. I thought at first that the latter might be a fibroid (but soon found that it was not sufficiently hard for that), and then that it was a small ovarian cyst which had slipped down into Douglas's cul-de-sac. When I resorted to conjoined manipulation, however, I at once found that the body of the uterus was not in its normal position, and the passage of the sound showed that there was complete retroflexion of the organ. If the diagnosis of prolapsus uteri had been taken for granted here, and a pessary appropriate for that condition ordered, it would have done harm instead of benefitting the patient. A pessary for prolapsus can do no good where there is retroflexion of the uterus, and this is altogether the most marked case of retroflexion that has been at the clinic for at least a year.

The question now comes up, Has all this trouble come on since the birth of her last child, six months ago? I think not; for it is much more probable that the prolapsus of the bladder was the result of her first labor, six years ago. The retroflexion, however, I believe must have followed the last one, six months ago; because it is so extremely marked that I can scarcely see how it is possible that so many conceptions should have occurred with the organ in this position.

This patient, I believe, can be cured; but it will be a very troublesome case to treat. What shall we do first here?—restore the perineal body? If we do, we shall most certainly fail in curing the patient; because this bladder, instead of being of the normal size, is now three times as large as it ought to be, and it cannot be satisfactorily supported in its present condition. The only proper way to proceed here is to begin by reducing the size of this organ, and this can be done most simply by taking an ellipse from its walls, and bringing the denuded mucous membrane together by means of silver wire sutures. After the operation Sim's glass plug should be worn for a time in the vagina, and at the end of nine days the sutures should be removed. Thus having succeeded in markedly diminishing the size of the hypertrophied bladder, the next step will be to restore the perineal body by the usual operation; and the uterus, having then been replaced, should be kept in position by a pessary. When all this has been done for her the patient will imagine that she is cured; but in every such case you should beware of telling the woman that she can get along without wearing a pessary. I should think it would be folly two or three years before the pessary could be safely abandoned in the present instance, because the uterus has completely lost its tone.—Dr. Thomas—*Boston Medical Journal.*

The Cure of Varicocele by Subcutaneous Ligature.—Dr. John Duncan, of Edinburgh, employs carbolized catgut for the radical cure of varicocele. The veins are separated from the artery and vas deferens, and a needle armed with catgut is thrust through at the point of separation; it is then reintroduced at the orifice of emergence, made to pass between the veins and the skin, and brought out at the original entrance; the two ends are then firmly knotted together and cut short; by traction on the scrotum the knot is made to disappear entirely, and the punctures are covered with salicylic wool saturated with collodion. The same manœuvre is repeated an inch higher, and sometimes a third ligature is advisable. A hard lump of coagulum forms between the ligatures, tender at first, but soon diminishing in size and becoming insensitive. Dr. Duncan treats varicose veins of the leg in the same manner, the introduction of the point of the needle into the aperture of exit of the first puncture, and the tightening of the loop of catgut is difficult when there is brawny œdema; in such cases the patient should be kept at rest, and an India-rubber bandage applied for a few days. A single ligature is not sufficient, and to close the lumen permanently, two must be applied about one inch apart. It is essential that no branch be given off in the segment of vein between the ligatures.—*British Medical Journal.*

Potassium Bromide in Orchitis and Inflamed Breasts.—Dr. J. Grammer, M.D., says that, when consulted in time, he finds nothing else necessary, either in orchitis or milk breast, but potassium bromide, in five-grain doses, three times a day, or smaller doses, more frequently repeated. In advanced or complicated cases, of course auxiliary measures should be used, if only as a precaution, or to expedite the cure; but he has never had the bromide to fail him even when used alone.

In orchitis, a suspensory should always be worn.

In some of these cases, he has seen the disease held in abeyance for weeks, when the patients, would persist in the grossest imprudence, in walking and horseback-riding. He rarely restricts them in diet. Yet even these cases eventually recovered, without suppuration or atrophy,—neither of which results has he seen since he has used this remedy.

He has had no opportunity to test it in the metastatic orchitis of mumps, but is sure it will prove as useful as in the ordinary cases; and though it is a specific inflammation, he expects to find it efficient in the next epidemic of parotiditis he may meet with.

Dr. Grammer has seen but one case of mammary abscess since he commenced the use of the bromide of potassium for such cases, and that case occurred not very long ago. The abscess had already pointed when he first saw it. He opened it, and prescribed potassium bromide, gr. ij, every three hours during the day; and in less than a week her husband reported the patient well. This, however, was not a fair test of the effect of the bromide on a mammary abscess, for there was no infant to complicate or irritate the inflammation. It was to Dr. Grammer a unique instance of the secretion of milk during pregnancy. The woman was four or five months advanced with her fourth child, and she stated that, being habitually rather irregular, she always recognized her pregnancy by the appearance of milk,—the secretion of which thenceforth continued.—*Virginia Medical Monthly.*

A New Disinfectant.—A cheap and useful disinfectant is a solution of chloride of lead. It is inodorous, effective, and its cost very small. It may be prepared as follows: Take half a drachm of nitrate of lead and dissolve in a pint or more of boiling water. Dissolve two drachms of common salt in a pail or bucket of water, pour the two solutions together, and allow the sediment to subside. The clear supernatant fluid will be a saturated solution of chloride of lead. A cloth dipped in a solution of chloride of lead and hung up in a room will sweeten a fetid atmosphere instantaneously, or the solution thrown down a sink, water-closet, or drain, or over a heap of refuse, will produce a like effect.—*Progress of Science.*

Pyæmia and Septicæmia.—Dr. Ambrose L. Ranney, in a lecture before the Anatomical and Surgical Society of Brooklyn, N. Y., gives his views as to the essential points of difference between pyæmia and septicæmia. Septicæmia he regards as a condition dependent upon a blood poison induced by the contact of decomposing animal matter with living tissues, and then carried by the lymphatics into the general circulation, and is never attended with so called 'metastatic abcesses or infarctions." The blood in septicæmia loses its coagulability, and rapidly decomposes when drawn from the body. A suitable soil for its development is any sloughing wound, especially connected with tissues well supplied with lymphatics.

Pyæmia he recogn zes as a blood poison brought about by the contact of a miasm with pus, and then absorbed by the blood-vessels, or, it may be the result of suppurative plebitis, either in an open wound or concealed traumatism. In either of these conditions there are always "metastatic abscesses," and the blood of pyæmic subjects has the power of "spontaneous coagulation" in the smaller blood-vessels, thereby showing its current, and causing an embolic infarction, which may be followed by a so-called metastatic abscess. In reference to the symptoms of these diseases, the onset is nearly similar, both are ushered in by a chill, while septicæmia generally has but the one chill, pyæmia has a succession of them. The temperature of septicæmia is higher than that of pyæmia, and of shorter duration, and nature attempts an elimination of the poison by a profuse watery diarrhœa.

The author's treatment does not vary much from that of others at the present time, namely, disinfection, drainage tubes, when necessary. and thorough ventilation, together with supportive treatment. He prefers "Platt's chlorides" in solution, one to six, or one to forty of water, rather than the disagreeable odor of the carbolic solution. He impressed his hearers with the importance of the general condition of the patient before an operation, a fact too often neglected.—*Annals of Anatomy and Surgery.*

Fracture of the Patella, Treatment by the Weight and Pulley. (N. Y. Med. Record.)—At the Presbyterian Hospital, there are two cases of fracture of the patella under the care of Dr. Geo. F. Shrady, which are being treated by the weight and pulley. Both fractures are transverse, were occasioned, as usual, by muscular violence, and the fragments were separated three-fourths and one and one-fourth inch respectively. The limbs are elevated on a single inclined plane, and two strong, broad bands of adhesive plaster are applied diagonally to the anterior portion of the thigh, crossing each other just above the patella, and embracing a pad at the upper margin of the upper fragment. These bands terminate in loops on each side of the leg, and are attached to stout cords which pass to a foot-piece and over a pulley to the weights. The lower fragment is merely fixed by a bandage passed around the splint. Extension is made over the entire region of the quadriceps muscle, while the pad applies itself over the upper edge of the upper fragment, bringing it in apposition to the lower fragment. By these means the fragments are maintained in perfect apposition, without discomfort to the patient. Dr. Shrady prefers this method of treatment to any other he has employed.

Awkward Medical Politeness.—A physician was called to visit a lady living at a considerable distance from him. After continuing his calls for some time, she expressed fear that it would be inconvenient for him to come so far on her account. "Oh, madam," replied the Doctor, innocently, "I have another patient in the neighborhood, and I can thus kill two birds with one stone."—*Chicago Medical Review.*

Treatment of Hæmorrhoids.—Dr. Todd (*St.*

Louis Medical Courier, September, 1881,) says in regard to the treatment of hæmorrhoids that the first step is the administration of a saline cathartic: the best is sulphate of magnesium. After this the following pill may be used:

℞ Ext. colocynth. co., gr. xxx;
Ext. nucis vomicæ, gr. xx;
Ext. belladonnæ, gr. x.

Div. in pil. no. xl. One to be taken every evening on going to bed. More or less may be given, according to the effect produced, the object being to secure one full, soft evacuation daily,—neither more nor less. Relief from pain may be gained by the following:

℞ Iodoformi, ʒj;
Bals. Peruv., ʒij;
Ol. theobromæ et ceræ albæ, aa ʒiss;
Magnesia calcinat, ʒj. M. bene.

Fiat in suppositoriæ no. xij. Insert one after each evacuation of the bowels, or, if necessary oftener. Iodoform is a local anæsthetic of great power, and does not constipate.

Hæmorrhoids of long standing will only be benefited by this treatment, not cured. Dr. Todd's plan of radical treatment is as follows. All tumors found at the verge of the anus, and covered in part or wholly with integument, are clipped off with the scissors. If situated within the external sphincter,—the bowels having been moved with a dose of sulphate of magnesia given a few hours before,—the patient is placed over a vessel and directed to strain (a vessel filled with hot water is best). If the tumors do not come within reach in this way, the finger should be thrust into the bowel, provoking tenesmus, and the patient again be instructed to force the piles down. When within reach,—the nates being separated by an assistant,—the tumors are seized one by one with a forceps and held, while with the hypodermic syringe from five to ten minims of a solution of nitrate of silver (one drachm to the ounce of distilled water) are injected into each, not stopping till all have been thus injected. No pain is felt except what is caused by handling parts rendered hypersensitive by protracted irritation.

One of the suppositories before mentioned may now be passed into the bowel, and thenceforth, if the treatment already given for removal of constipation may be followed up assidiously and patiently, little further inconvenience will be felt and no further treatment required. Even though the suppository be omitted, little pain is felt, and the patient goes at once about his business. The tumors immediately become hard, atrophy, and in about ten days have wholly disappeared. They can only recur from the cause which first produced them. Dr. Todd says that he has not had occasion to repeat this little operation in the same individual but once, which was in the case of an old gentleman, in whom tumors located higher in the bowel subsequently came down and were cured by the same means.

Accidental Ante-partum Hæmorrhage.—Dr. Edward L. Partridge, of New York, Physician to the Nursery and Child's Hospital, contributes to the *New York Medical Journal and Obstetrical Review*, an article in which, after briefly reviewing the current doctrines concerning so-called accidental hæmorrhage preceding the birth of the child, he boldly challenges the expediency of the practice of rupturing the membranes. He believes, first, that rupture of the membranes does not meet the indications—i. e., it does not in itself or in its results offer any reasonable probability of checking the hæmorrhage—and, secondly that the method is highly dangerous from the increase of facilities for loss of blood, and because it adds to the difficulty and danger of the proper subsequent steps in treatment. The suggestion of Leishman to the effect that the placenta will be compressed between the uterus and the child after the escape of the liquor amnii, and hæmorrhage thus be checked, is, Dr. Partridge thinks, fanciful.

The Utility of Strychnia as an Expectorant.—J. Milner Fothergill (British Med. Jour.) says: The experiments of Rokitansky have shown that strychnia is a powerful stimulant of the respiratory centers, and I have arrived at the same conclusion from experiments upon rabbits. When the respiratory center was paralyzed by aconite the injection of strychnia exercised a most potent influence in restoring the circulation. I have used it clinically with much success, when the respiration was embarrassed, in acute bronchitis with difficult expectoration, in chronic bronchitis and emphysema, and when the right ventricle was dilated, it added to the efficiency of digitalis.

Treatment of Cystitis.—Dr. A. J. C. Skene, of Brooklyn, gives the following, which he regards as almost specific in its influence, especially in the earlier stages, affording rapid and lasting relief: R. Acidi benzoici, sodii biboratis, *aa* grs. x.; Inf. Buchu ʒij. M. Sig. This quantity to be taken three or four times a day. The diet should also be carefully regulated, and the skin and bowels kept in an active condition.—*Cin. Lancet and Clinic.*

Prof. Charcot is not so familiar with the English language as with the nervous system. At the meeting of the International Medical Congress several English and foreign doctors were discussing the style of apparel most suitable for a reception which was to come off that evening. Prof. Charcot quietly observed, "As for me, I shall go in my night-dress.—*Medical and Surgical Reporter.*

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.*

AGENTS.—DAWSON BROS., Montreal; J. & A. MCMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 16 Rue de la Grange Bateliere, Paris.

TORONTO, FEBRUARY, 1882.

This Journal has the largest circulation of any Medical Journal in Canada.

PRACTICAL TEACHING.

The tendency of the teaching in the present day in all departments of science, is in the direction of the acquirement of a greater amount of practical knowledge, and the elucidation of all subjects capable of being demonstrated, by the use of practical modes and appliances. The use of instruments of precision, and the application of all known methods of observation and analysis, are being brought to bear on the solution of all difficult problems, both in nature and science. Men of science no longer grope in the dark when they have instruments of precision to aid them in searching for truth, and that they fully appreciate such aids in their labors is shown in the fitting up of costly laboratories for the work of instruction and investigation. Hence there have sprung up within a few years, schools of practical or applied science, physiological and pathological laboratories, &c., &c., where investigation and instruction go hand in hand. It must be conceded by all who have given any consideration to the subject of education, general or special, that, wherever practicable, this is the direction in which the training of the youth of the country should be directed. It has been well said by a great writer that the knowledge gained from books, however valuable, is of the nature of learning, but that gained from observation and investigation is wisdom. This is essentially true of all knowledge which is to have a practical outcome, and especially so in regard to the practice of medicine.

With a view to the practical instruction of candidates for the profession of medicine, in addition to the dissecting rooms for the acquirement of a practical knowledge of the anatomy of the human body, chemical, pathological and physiological laboratories have been established, some of them at great expense. In European countries great attention is being paid to the practical and clinical teaching of all candidates in medicine, and in our own country much has been, and is now being done every year, in the same direction. The medical authorities are thoroughly alive to the interests of the profession, and costly laboratories have been fitted up in McGill College and Bishop's College, Montreal, and also in Trinity Medical College, Toronto. It has been recently stated that an effort was about being made by parties interested in such a movement, to induce the Ontario Government to establish a chair of Physiology in connection with the School of Practical Science in Toronto. The establishment of such a chair for the teaching of this department, so far as embraced in their curriculum, would no doubt benefit the arts students in University College, but would not, as things are at present, be of any general service to medical education, but rather a detriment, as it would furnish an excuse to any parsimonious medical college for not equipping itself with suitable apparatus for teaching practical physiology. So far as medical education in Toronto is concerned, Trinity Medical College has taken the lead in this matter, and has, at her own expense, fitted up a well-equipped physiological laboratory, to which additions will be made from time to time, until it is made second to none, either in Europe or America.

The teaching of the practical branches, such as practical physiology, biology, chemistry, and botany, requires special preparation, and necessarily involves considerable time, hence it cannot, in the interests of the medical student be profitably engaged in during the winter session, when so much didactic and clinical work are upon his hands. It would be well, therefore, we think, to make arrangements for the teaching of these branches during the summer months, and this movement would be greatly facilitated if the Medical Council at its next meeting were to add a summer course of three months to the present curriculum. The present curriculum though no doubt high for a com-

paratively new country, is yet much below what obtains in most European countries. In Great Britain the curriculum in medicine extends over a period of four winter sessions of six months, and two summer sessions of three months; in Germany four years of nine and-a-half months each; in Austria and Russia five years of nine months each, in France four years of ten months each; Belgium five years; Holland six years; Italy six years of nine and-a-half months each; Norway six years; Denmark seven years, and Sweden ten years. The division of the periods of study in Great Britain is the one that seems best adapted to the genius of our people. Auxiliary faculties for the teaching of the classes during the summer months, might be appointed, and thus many meritorious young men would not only have an opportunity of bringing themselves into prominence, but also pass through a probationary period before being promoted, when found worthy, to vacant chairs in the main faculties.

We trust that the suggestions here thrown out, and the plan hurriedly sketched, may not be altogether lost sight of, as we sincerely believe their adoption, as soon as practicable, would be for the advancement of the best interests of the profession in Canada.

MEDICAL LIBRARIES.

We have before us the sixth annual report of the Boston Medical Library Association. Along with this report is also published the "Dedicatory Address" delivered by Dr. Oliver Wendell Holmes, of Boston, on the occasion of the dedication of the new building and hall of the Boston Medical Library Association, on December 3rd, 1878. The report and address contain much valuable information in regard to the formation of medical libraries in general, and much food for reflection in reference to the value of establishing such libraries in professional centres. This association, which is as yet in its infancy, having been only a few years established, has already become a permanent institution. The library contains upwards of 12,000 volumes, and is regularly in receipt of upwards of 280 periodicals. It stands sixth on the list of medical libraries in the United States, although founded as late as 1875. Much of the success is due to the indefatigable efforts of the librarian, Dr. James R. Chadwick. The Hall, valued at $20,000, is capable of seating two hundred persons, and is rented by all the medical societies of Boston for their meetings. The reference library contains over 10,000 volumes and nearly 6,000 pamphlets; and the circulating library upwards of 2,200. There are also capacious and convenient reading-rooms, well supplied with the current literature of the day. Many of the volumes in the library have been donated to the association by members of the profession in Boston and vicinity; some have been purchased from funds at the disposal of the association, and others have been obtained by way of exchanges.

The U.S. National Medical Library at Washington contains upwards of 60,000 volumes, and as many pamphlets, although only about fifteen years in existence. It is the largest medical library in the world. This rapid growth has been due to purchases, exchanges, and also in great part to the liberality and public spirit of many members of the medical profession in the United States. There are also two large medical libraries in Philadelphia and two in New York, besides others in various cities in the United States.

Dr. Holmes, in his dedicatory address, after alluding to the rise and progress of the medical associations in Boston, said "the time had arrived for a new and larger movement. There was needed a place to which every respectable member of the medical profession could obtain easy access; where under one roof, all might find the special information they were seeking; where the latest medical intelligence should be spread out daily, as the shipping news is posted on the bulletins of the exchange; where men engaged in a common pursuit could meet, surrounded by the mute oracles of science and art; where the whole atmosphere should be as full of professional knowledge as the apothecary's shop is of the odor of its mendicaments. This was what the old men longed for,—the prophets and kings of the profession, who

'Desired it long, but died without the sight.'

If such medical libraries are needed in Boston, New York, and Philadelphia, they are also needed, nay, urgently required, in Toronto, Montreal, Hamilton, London, and other large cities in Canada. The Hall of the College of Physicians and Surgeons in Toronto could be utilized with advan-

tage to the entire profession of Ontario for the formation of a medical library, and we have no doubt if it were formed, and a librarian appointed to look after the books, that many volumes now lying idle and covered up with the dust of years, would be contributed by some of the seniors in the profession for the general good. Others might also contribute magazines, periodicals, and recent medical books. A library to properly meet the need of our time, must contain an array of current medical periodicals, for these after all form the most attractive part of such an institution. The editors of the medical journals in Toronto and Montreal, we have no doubt would willingly supply a few periodicals and society reports from their exchanges, both home and foreign, which would aid materially in increasing the usefulness and value of this department. We would suggest to the Toronto Medical Society the propriety of appointing a committee to take this matter into consideratton, and to report upon the best method of carrying the above suggestions into effect. We feel assured the medical council will willingly co-operate, as far as they possibly can, in any movement for the establishment of a medical library in connection with the College of Physicians and Surgeons of Ontario.

PRIVATE ASYLUMS FOR INSANE AND INEBRIATES.

The need of suitable private asylums for the treatment of a certain class of insane and inebriates is too apparent to require much comment at our hands. In all the larger asylums there is much danger from overcrowding, and besides, it cannot be expected that a large number of the patients under the charge of a Medical Superintendent and one or two assistants, can receive that share of personal and individual attention which may be obtained in a smaller Institution, hence, we are glad to find private asylums springing up in the United States and Canada, for the accommodation of those able to pay for their maintenance and treatment. Of course such Institutions should be, and are in some degree under Governmental supervision, as a guarantee of their suitability for the purpose aimed at, and of the integrity and good faith of those who undertake their establishment, as well as to ensure the confidence of those who may place their friends under treatment. All asylums for the care of these unfortunate classes of patients should be made as pleasant, cheerful, and homelike as possible, and this homelike feature should be combined with all manner of innocent amusement. So far as we know there is but one private asylum for insane and inebriates in Canada, we refer to the "Belmont Retreat," Quebec. This institution has at the head of it Dr. Wakeham, a man of great experience in the management of the insane, and the building and surroundings are of the most desirable character. There are twenty-five acres of land in meadow, garden and lawn, which give employment to a number of patients, so that where the elements of cure do not exist, this at least makes their life pleasant and tolerable. The leading feature of this asylum is the treatment of insane, but the Superintendent holds a permanent licence from the Government to provide for a limited number of inebriates, and these are separate and distinct from the other patients. Several excellent institutions of this class exist in the United States, especially the "Shady Lawn," in Northampton, Mass., and "The Inebriates' Home," Fort Hamilton, L. I. The former is a private medical home for invalids, the treatment of lunacy, nervous diseases, ailments of women, and original methods of treating alcohol and opium habitués; and the latter is devoted entirely to the cure of alcoholism and the opium habit. Both gentlemen connected with these institutions, have had large experience in the special treatment of these affections, and may be confidently relied upon to do all that human skill can suggest for the relief of their patients. The patients treated at these asylums are of a higher social grade than the generality of those sent to the Provincial or State Asylums, and they enjoy a greater degree of retirement from the curiosity of the public than in the larger establishments. We would therefore commend these private institutions to the attention of the friends of those who are in a position to avail themselves of their benefits.

MEMORIAL TO THE HON. DR. ROLPH.—It is in contemplation to erect a memorial to the memory of the late Hon. Dr. Rolph in this city, if sufficient encouragement is obtained from his friends

and former pupils to warrant the undertaking. It is now twelve years since his death took place, at the advanced age of 83. For half a century his name was more or less familiar to the Canadian public. Owing to his long connection with medical teaching, and his pioneer labors in this direction, he was justly styled the Father of the Canadian medical profession. His body now lies in a neglected grave in the village of Mitchell, Ont., and it is, we think, almost a duty we owe to the memory of this great man, that his name should be perpetuated by some appropriate memorial.

Contributions with this object in view may be sent to this office, the receipt of which will be acknowledged in our columns.

Obituaries.—Mr. South, F.R.C.S., London, England, died on the 9th of January, at the advanced age of eighty-five years. Mr. South was for many years intimately connected with the College of Surgeons, having been elected to the Council in 1841, and served faithfully on all boards, courts, and committees. He was twice elected President. As an examiner he will no doubt be remembered by many as rather severe, and brusque in manner. It was through his efforts that the remains of John Hunter, which first found a resting place in the vaults of St. Martin's-in-the-Fields were re-interred in Westminster Abbey, and the inscription on the tablet in the latter place was from his pen.

The death of Prof. Draper, of New York, on the 4th of January, at an advanced age, is reported in our exchanges.

Nikolaus Pirogoff, the originator of the operation on the foot known as "Pirogoff's Amputation," died a few weeks ago in St. Petersburg.

Dr. Theodore Schwann, the eminent Belgian physiologist, is dead.

Removal of a Cyst of the Pancreas.—Dr. N. Bozeman reports in the *Medical Record* for January 14, 1882, the removal during life of a cyst of the pancreas, weighing 20½ pounds. The case is interesting from the fact that it is the first operation of the kind on record. It was mistaken for an ovarian cyst. Five years ago the abdomen began to enlarge on the left side, and gradually increased until the entire cavity was distended symmetrically. Upon opening the abdomen the uterus and ovaries were found perfectly normal, and upon careful examination the pedicle was found attached to the junction of the outer third of the pancreas. It was transfixed and tied in the usual way. The patient was discharged cured on the 38th day after the operation.

Removal.—J. Stevens & Son, surgical Instrument makers, have removed to larger and more commodious premises, No. 40 Wellington St. East, Toronto. This firm is supplying a want long felt in this Province, and has already by strict attention to business and careful consideration of the general wants of the profession, built up an excellent business. Our confrerés need be at no trouble or inconvenience in regard to obtaining surgical instruments or appliances, on the shortest notice. The gentleman at the head of the Canadian branch of the business is perfectly reliable, and a good business man.

Lister's Dressing Modified.—Dr. Little, *New York Medical Journal*, of December, 1881, gives the following as his method of treating wounds which he has found very satisfactory. The wound is first washed in a solution of carbolic acid of the strength of one in twenty; the parts are then covered with a thin layer of borated cotton, and a simple gauze bandage is snugly and evenly applied. These thin bandages distribute the pressure more evenly over the cotton, and are more easily saturated with fluids than those made of unbleached muslin. The patient is instructed to keep the outside of the dressing wet with a solution of carbolic acid of the strength of one to one hundred.

The Right to bear Arms.—Daniel Webster once took a young lady, a relative of his son's wife, to task for wearing short sleeves, and animadverted on bare arms. "Why, Mr. Webster," exclaimed the young lady, "I'm astonished that you, the great expounder of the Constitution, should object to bare arms!" "What has my expounding the Constitution got to do with it?" growled Daniel; to which the young lady replied: "Doesn't the Constitution say that the right to *bear arms* shall not be interfered with?" History does not record the effect of this shot, but Webster died that same year.

Boracic Acid in Gonorrhœa,—Dr. A. J. Roe (*Mich. Med. News*) says he has treated a great many cases of gonorrhœa by means of boracic acid injections, and his results are very satisfactory. He employs the acid in the strength of ten grains to the ounce of water, morning and evening, after urinating. This treatment usually allays the inflammation, and relieves the pain and chordee, inside of thirty-six hours, and complete cure is generally effected inside of a week or ten days.

Amyl. Nitrite in Opium Poisoning.—Dr. Turner in the *St. Louis Courier of Medicine* gives his experience in the use of amyl nitrite in two cases of opium poisoning. The effect of the amyl nitrite was to increase the number of respirations, and rapidity of the pulse almost instantly, and by continuing the inhalation at intervals for an hour or two, he had the satisfaction of seeing his patients recover.

Infantile Eczema. — The following mixture has been found very beneficial in the treatment of this perverse affection, viz: Oil of cajuput one drachm combined with one ounce of zinc ointment. Dr. Claiborne of Virginia (*Gaillard's Medical Journal*) discovered its value through a mistake by his druggist, who put it up in a mixture instead of oil of cade which was ordered. It cured the patient and many others since.

Memorial to Erichsen.—It is proposed by the friends of Mr. Erichsen, of University College London, to erect a marble bust of that gentleman, to be placed in the University as a mark of respect for his long connection with its Medical School.

Appointments.—Dr. Charles O'Reilly medical superintendent of the Toronto General Hospital, has been appointed examiner in clinical medicine and surgery, for Toronto University, Dr. I. H. Cameron, in anatomy and surgery, and Dr. Ellis in Chemistry. The remaining examiners in medicine are the same as last year; viz.: Drs. Eccles of London, D. B. Fraser of Stratford, and Geo. Wilkins of Montreal.

Dr. J. R. Kippax, formerly of this city, has been appointed on the acting staff of the Cook County Hospital, Chicago, in conjunction with five co-professionals, in accordance with the recent action of the board for dividing the appointments to this hospital between allopathic and homœopathic physicians.

Reports of Societies.

TORONTO MEDICAL SOCIETY.

Nov. 17th, 1881. The Society met at 8.30 p.m., the president in the chair. The minutes of last meeting were read and approved.

Dr. Macdonald showed a vermiform appendix, taken from a patient who, for some days prior to his death, had been suffering from localized peritonitis in the region of the cæcum; the appendix showed two points of ulceration, with perforation, and in its interior it contained a hardened nodule of fæcal matter, which was situated between the points of ulceration.

Dr. Nevitt mentioned a case of fæcal impaction, where there was perforation, death resulting in 36 hours.

Dr. Cameron next showed a case of pseudo-hypertrophic muscular paralysis in a lad aged 11. He gave a detailed account of the family history, which showed that the disease could not be traced in any of the patient's ancestors or members of his own family; the patient was quite well until about 3 years of age, after that there began to be loss of power, and feats of strength and agility which he could not perform, were easily accomplished by children of more tender years, while the excessive enlargement of the muscles of the calf was the subject of much admiration. The patient when placed on his back, has no power to regain the erect posture without assistance, and his mode of progression is peculiar, especially when he ascends the stairs. There is excessive prominence of the gastrocnemii and solei, while the muscles of the brachial region are somewhat wasted, and there is well marked lordosis.

The treatment adopted is by the administration of cod liver oil, syr. iodide of potash, and arsenic. The P. M. lesion is always the same in the muscles, but there is want of uniformity in the lesion in the cord.

The president then mentioned several cases which had recently come under his notice, among which were, 1st, a case of ovarian tumor, which was a multiple cyst, and contained about 50 lbs. of fluid in its interior; 2nd, a gun-shot wound of the arm, in which there was no discharge from the track of the ball, the wound having been dressed under the spirit lotion. He also mentioned the beneficial effect hyoscyamine had in quieting patients suffering from acute mania, given in doses of

⅛ to ½ grain, and also related the effects the dose of ⅛ grain had upon himself.

Dr. Rosebrugh then read his paper on "Electricity in the Treatment of Special Diseases," a full, report of which has appeared in the CANADA LANCET.

Dec. 1st, 1881. The Society met at 8.15 p.m., the president in the chair. The minutes of the last meeting were read and approved.

Dr. Going was proposed a member of the Society.

Dr. Oldright then showed a man who, eighteen months ago, had received a comminuted fracture of his right tibia and fibula in their lower third; six weeks after the accident, the fractured limb became swollen and œdematous, and some time afterwards the sound limb also became swollen. The case, as presented to the Society, showed great swelling and œdema of the affected limb, and an indolent ulcer on its anterior and inner surface. The patient is of temperate habits, he has no cardiac affection, and the urine, when examined shortly after the accident, was found normal. Dr. Oldright asked for a solution of the case, but an answer was wanting.

Dr. Graham next exhibited a girl, æt. 5, whose mode of progression was awkward and difficult, and the appearance simulated somewhat that of hip disease; the affection has always existed. Dr. Graham had seen three cases similar to this disease; tendon reflex, although absent in this case, is well marked in some. Drs. Canniff, Oldright, Cameron and others discussed the case.

Dr. Cameron exhibited a piece of gravel (about the size of a small castor-oil bean), which he had removed, after it had existed in the external auditory canal for two and a half years without symptoms.

Dr. Graham showed a piece of cotton wool which he had removed from the naris of a child, where it had been lodged three or four years, and in consequence of which the child suffered from ozæna.

Dr. Rosebrugh then read a continuation of his paper on The Uses of "Electricity in the Treatment of Special Diseases." Dr. Rosebrugh, of Hamilton, being present, made a few remarks upon the paper.

The Society then adjourned.

Books and Pamphlets.

TEXT-BOOK OF MODERN MIDWIFERY, by Rodney Glisan, M. D., Prof. of Obstetrics in the Williamette University, Oregon. Philadelphia: Presley Blakiston. Toronto: Willing & Williamson.

Obstetric text books are already as thick as leaves in Val Ambrosa, and by some, probably the *raison d'etre* of a new competitor might be questioned. The author, however, believed that there was a demand for a work which should more thoroughly represent American obstetric practice, and most ably and pointedly has he accomplished his task. The work will deservedly rank high among the numerous treatises on the science and practice of Midwifery, embodying as it does all recent views and acknowledged improvements in practice. The young practitioner and also the more experienced, will find this volume a useful guide in the most anxious and responsible branch of the profession. The chapters on the anatomy of the pelvis, mechanism of labour, face presentations, hœmorrhage before and after labour, and on other subjects, are clear and concise. The author, like most other American practitioners, inclines to the position on the back in delivering with forceps, applying the blades to the sides of the child's head, whether the latter be below or above the superior strait, arguing that although the application of the instrument to the sides of the pelvis has simplicity in its favour, yet in proportion to the favour it receives will be the decrease in the knowledge of the mechanism of labour by those who practice it. The work has been well brought out by Presley Blakiston, in binding, type and paper. The illustrations have been obtained chiefly from the works of Cazeaux, Meadows, Playfair, Leishman, Churchill and Hodge. Cloth, $4.00; sheep, $5.00.

ECZEMA AND ITS MANAGEMENT, by L. Duncan Bulkley, M.D., New York. New York: Putnams' Sons. Toronto: Willing & Williamson.

Sir Erasmus Wilson remarks, "That to be a successful practitioner in the treatment of eczema, a medical man must be an accomplished physician: to manage the local treatment with success he must also be an able surgeon. In a word the highest and best qualities of medical art and science must be put in practice with foresight and discretion for

the treatment of an eczema." The author of the above treatise has proved conspicuously that he is both, and in the pages of this work the general practitioner will find lucid and succinct descriptions of the various phases of the disease in question, as also guides to their recognition and management. The author has divided the subject into sixteen chapters, i. e., definition, frequency, symptoms, forms, diagnosis, nature, (constitutional or local) causes, treatment. Management of infantile, of the face and scalp, of the hands and arms, of the feet and legs, of the anus and genitals of the trunk. Diet and hygiene of eczema; therapeutics of eczema. Dr. Bulkeley, while contending for a constitutional origin, admits that it may become a local disease in its skin lesions, and as such may very largely be amenable to local treatment. We can heartily recommend this new addition to the literature of eczema to our medical brethren, being well assured that a perusal will greatly assist them in the treatment of this too frequent opprobrium medicorum. The book is well printed on fine paper, and is a credit to the publishers.

A Treatise on the Diseases of the Nervous System. By William A. Hammond, M.D., Professor of Diseases of the Mind and Nervous System in the Medical Department of the University of the City of New York. With one hundred and twelve illustrations. Seventh Edition, rewritten, enlarged and improved. New York: D. Appleton & Co. Toronto: Willing & Williamson.

We have much pleasure in calling the attention of the profession to this revised edition of Dr. Hammond's well-known and popular work on nervous diseases. The present edition has been greatly enlarged and improved. The chapters on insanity have been omitted, for the reason that the author is now engaged in the preparation of a special treatise on this important subject. There has been considerable amplification of the chapter on cerebral congestion, a new chapter on myxœdema, and others on syphilis of the brain, spinal cord and nerves, also a new section on diseases of the sympathetic nervous system. Material additions have also been made to the chapters on locomotor ataxia, progressive facial atrophy, chorea, epilepsy, neuralgia, etc. We regard Dr. Hammond's work as excellent authority on the subject of nervous diseases, and frequently refer to it in our study of these affections.

A Manual of Histology. Edited and prepared by Thomas E. Satterthwaite, M.D., President of the New York Pathological Society, Pathologist to St. Luke's Presbyterian Hospital, etc. With one hundred and ninety-eight illustrations. New York: William Wood & Co. Toronto: Ure & Co.

The author has associated with him in the work of preparing this book for the press, Drs. Thomas Dwight, J. Collins Warren, William F. Whitney, Clarence J. Blake, and C. H. Williams, of Boston; Dr. J. Henry C. Sims, of Philadelphia; Dr. Benjamin F. Westbrook, of Brooklyn, and Drs. Edmund C. Wendt, Abraham Mayer, R. W. Amidon, A. R. Robinson, W. R. Birdsall, D. Bryson Delavan, C. L. Dana, and W. H. Porter, of New York. The work, therefore, represents the combined wisdom of several eminent American histologists, each article being written by one who is considered an adept in his particular *rolé*. As a manual, it is full and comprehensive, the cuts numerous and tolerably accurate, and the directions for preparing and mounting, clear and easily followed. It will be found of great value to the student of histology, and we cordially commend it to all who desire to study this attractive branch of medicine.

The Applied Anatomy of the Nervous System. Being a study of this portion of the humany body from a standpoint of its general interest and practical utility, designed for use as a Text-Book and a work of Reference. By Ambrose L. Ranney, A.M., M.D., Adjunct Professor of Anatomy in the Medical Department of the University of the City of New York. New York: D. Appleton & Co. Toronto: Hart & Co.

In this work the author has endeavoured to bring before his readers the anatomy of the nervous system, associating with it a brief description of the diseases met with in connection with the structures affected and the symptoms which accompany them, the object being to fit the practitioner and student to pursue his studies in this special line without embarrassment. The treatment of nervous diseases is not touched upon. The work abounds with illustrations, some original, but most of them drawn from other well-known works. They are all well executed, and reflect great credit upon the publishers. The work is worthy of the special attention of those who are working up the subject of nervous diseases.

A Treatise on the Diseases of Infancy and Childhood. By J. Lewis Smith, M.D., Clinical Professor of Diseases of Children in Bellevue Hospital Medical College, Fifth Edition, thoroughly revised, with illustrations. Philadelphia: H. C. Lea's Sons. Toronto: Hart & Co.

We gladly welcome to our shelves the new edition of this highly valuable, and deservedly popular work on diseases of children. The work has undergone a thorough revision, and some new matter has been added, notably a chapter on strumous ophthalmia. The author is very full and explicit in the matter of treatment, a most gratifying feature in modern text-books, in many of which too little attention is devoted to such details. We can confidently recommend this work a most reliable guide in the treatment of children's diseases. The new volume comes to us in the elaborate half Russia binding recently adopted by this well-known publishing house.

Lectures on the Diagnosis and Treatment of the Chest, Throat and Nasal Cavities, by E. Fletcher Ingals, A.M., M.D. New York: Wm. Wood & Co. Toronto: Willing & Williamson.

These lectures, thirty-two in number, are a valuable addition to extant works on the same subject. They set forth concisely, but very clearly, what is known on these diseases, and will be found both to practitioner and student, of great value in forming a differential diagnosis. The chapters on "Physical Diagnosis," "Percussion," "Auscultation," and "Heart sounds," are well calculated for teaching the young beginner exactness. The work is well written, and bears evidence of the writer being a master of the subjects discoursed on. The appendix contains a number of useful formulæ.

A Practical Treatise on Hebnia. By Joseph H. Warren, M.D. Second and Revised Edition. Illustrated. Boston: James R. Osgood & Co. Octavo, pp. 428. Price $5.

This is a very carefully prepared text-book on hernia, practical, well illustrated, and rich in clinical details. The author has given the profession in the work before us not only a good digest of the literature on this subject, but also a mine of practical experience. Everything of value and importance connected with this subject has been embodied in this work, and therefore we heartily commend it to the attention of the profession.

Landmarks, Medical and Surgical, by Luther Holden, F.R.C.S., Eng., Consulting Surgeon to Saint Bartholomew's and the Foundling Hospitals. Assisted by James Shuter, M.A. Camb., F.R.C.S. From the third English editon, with additions, by William W. Keen, M.D., of the Philadelphia School of Anatomy. Philadelphia: Henry C. Lea's Son & Co. Toronto: Hart & Co.

Holden's Landmarks are well known and highly appreciated by the profession both in Europe and America, and the issue of the third edition fully attests its continued popularity. The additions by Dr. Keen of Philadelphia still further enhance the value of the work.

The Opium Habit and Alcoholism. A Treatise on the Habits of Opium and its Compounds; Alcohol; Chloral Hydrate; Chloroform; Bromide of Potassium; and Cannabis Indica; including their therapeutical indications. With suggestions for treating various painful complications. By Dr. Fred. Herman Hubbard. New York: A. S. Barnes & Co. Toronto: Willing & Williamson.

This work treats principally of the opium habit and alcoholism, a few chapters only being devoted to chloral hydrate, chloroform, etc. The management of this unfortunate class of patients, which seems yearly on the increase, is laid down with great care and precision, and the work contains much that will interest the general reader.

The Prescriber's Memoranda. New York: Wm. Wood & Co. Toronto, Hart & Co.

This is an excellent reference book, and contains many useful and valuable hints upon disease and its treatment. It will be found very convenient for occasional reference.

Births, Marriages and Deaths.

At Adolphustown, on the 18th of December, 1881, Joseph Allen, M.D., aged 34 years.

On the 20th of Oct,, Dr. J. B. Smith, of Jerseyville, Ont., aged 27 years.

At Norwich, on the 11th of Dec., Dr. Gabriel Lount, aged 43 years.

On the 11th ult., at Grand Haven, Mich., Dr. A. J. Whitehead, aged 29 years.

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Original Communications.

LESIONS OF THE CENTRAL NERVOUS SYSTEM, OF PERIPHERAL ORIGIN. BY CH. TALAMON, REVIEW BY DR. A. LEONE.

(*Translated from "Il Pisani Gazzetta Sicula," Palermo.*)

BY JOSEPH WORKMAN, M.D., TORONTO.

The cerebro-spinal nervous axis is put into *rapport* with the various parts of the economy by means of two orders of conducting cords; one, forming the afferent system, transmits by the grey substance the impressions received at the periphery; the other, forming the efferent system, transmits movements and nutritive influence to the organs. The lesions of the latter—the centrifugal order—are at the present time very well known, because it has been almost exclusively to these that modern clinical and physiological studies have been directed. On the contrary, the lesions of the afferent apparatus have been left in obscurity.

Some histological and physiological researches by Leyden, Vulpian, Ghazem, and others, give us some precise notions of the alterations of the cerebro-spinal axis, consecutive to lesions of the extremities of the nerves—alterations which, heretofore, have been regarded as coming from primitive lesions of the central nervous substance, and not as the consequence of an affection localized in the periphery of the nervous system. It is on facts of this class that we propose to treat in this work.

We shall, first of all, study the results which pathological anatomy seems to have brought clearly into view, that is to say, the *atrophic modifications* observed in the central nervous system following the amputation of a member. In the second place, we shall speak of irritative lesions, experimental or pithological, observed to follow peripheral excitations. In the third place, we shall speak of certain symptoms or phenomena observed through centripetal irritation of the nervous centres.

CHAPTER I.

Of atrophic lesions of the nervous centres following the removal of a member.

A. *Lesions of the medulla.*—Laney and Basard had already noted, with the naked eye, an atrophy of the medulla or of the nervous roots in persons who had undergone amputations and had died a long time after the operation; but both the observations are incomplete. Besides these two, no others were found in the science related to this subject up to 1868, when Vulpian, in a memoir published in the *Archives of Physiology*, and Dickinson in another, published in the *Journal of Anatomy and Physiology*, reported several cases of atrophy more or less diffused in the parts of the medulla corresponding to the amputated member. In the greater number of the cases published by these two authors, the atrophy was observed more usually in the posterior fascicles than in the anterior, of the medulla.

After Vulpian and Dickinson, other observers, among whom are the two Italians, Buffalini and Rossi, have published analogous results. In 21 cases of amputation the following were the alterations found in the medulla:

1st. *In the white substance.*—Atrophy in the posterior cords in 17 cases, and in the anterior only in a few cases.

2nd. *In the gray substance.*—Atrophy, according to Vulpian and Dickinson, is more often in the posterior cornua than in the anterior; but neither Vulpian nor Dickinson have ever observed histological modifications, or diminution of the number of the cells, or atrophy of them. In one case alone, of amputation of the left leg, Vulpian found a very limited destruction of small islets in the gray substance. Geuzmer, in a case in which amputation of the thigh dated back almost 30 years, found diminution of the number of the nervous cells and a great diminution in their size. Lastly, in an observation of Hayem in a case of amputation of the thumb, there was found, besides general atrophy of the anterior cornua corresponding to the injured side, a great number of atrophied cells and some irritative lesion, not only on the atrophied side, but also on the other side; lesions analogous to those of a chronic central myelitis.

3rd. *In the nervous roots.*—Dejerin and Meyer, in three cases observed by them, found no alteration in the cut nerves; but Dickinson and Geuzmer observed atrophy in the nervous roots, apparently, according to Dickinson, in the posterior, but according to Geuzmer, in the anterior roots.

B. *Lesions of the brain.*—Dickinson, in four cases in which the operations took place many years before death, met with no appreciable anatomical modification in the cerebral hemispheres. The atrophy observed in the medulla extended to above the lumbar enlargement in the cases of amputation of the lower limb, and as far as the bulb at the superior limit of the decussation of the pyramids, in cases of amputation of the arm, but never above this point. Other observers have not been more successful.

The experiments of Fritsch, Nitzig and Ferrier, and the pathologico-anatomical researches of Charcot, have demonstrated the existence of atrophy in certain peripheral regions of the brain (the pretended motor zones) following the remote ablation of corresponding members (that is to say, the alteration was found on the right side when the mutilation had been on the left, and *vice versa*).

In contradiction of these facts, Brun, Pities, Féré, Major, and others, in cases of ancient amputations, found the cerebral hemispheres in all their convolutions in a state perfectly normal. Yet the facts demonstrating atrophy are of much greater number.

Outside the cases of amputation, studies have been made in those in which the patients have been long condemned to inaction, either from paralysis of a given member or from chronic articular rheumatism. *Example*—Landouzy, in a man who had arrest of development of the right leg, found the left hemisphere of less volume than the right. Oudin, in a woman who for 67 years had not used the right leg, found atrophy of the first frontal convolution at its union with the ascending frontal. See, in a subject whose right arm had been atrophied, observed that the left ascending parietal convolution was much smaller than the right. Luys, in a case of chronic rheumatism of three years' duration, found the same alteration.

CHAPTER II.

Irritative, experimental, or pathological lesions, observed in the motor nervous centres in sequence to peripheral excitations.

1st. *Experimental pathology.*—In these researches physiologists are divided into three classes. Some, as Roessingh, Rosenstein, Rosenbachs, and Vulpian, have never observed either medullary lesion or lesion along the superior end of the irritated nerve; others, as Tiesler and Feinberg, have, in a certain number of cases, met with some considerable alterations in the spinal axis, consecutive to localized inflammation in a part of the nerve, as far as the central parts.

We shall speak of the affirmative experiences of these authors. The lesions observed in the medullary axis, following irritation of the peripheral nerves, appear both in the involucres of the medulla and in the medullary substance itself, in the gray as well as in the white substance.

As to the lesions of the meninges, we may say that they have been met with in great frequency, if not, indeed, with constancy; and they vary from a simple hyperæmia to a focus of suppuration. Klemm observed in rabbits a sero-sanguinolent opacity in the dura mater, at the point where the irritated nerve is implanted in the medulla; in other cases he found a sort of inflammatory proliferation of the adipose cellular tissue in this membrane. In a cat he met with a true spinal pachymeningitis, having its origin at the point of emergence of the irritated nerve. In an experiment of Tiesler, reported by Professor Charcot, on a rabbit, dead paraplegic, three days after the application of an irritant agent on the sciatic nerve, saw a primary purulent focus in the thickness of the nerve at the point irritated, and another focus of suppuration in the vertebral canal, around the roots of the sciatic, near their emergence.

With regard to the lesions of the medullary substance, the studies have been carried out chiefly by Prof. Hayem on rabbits, both after eradication of the sciatic nerve, and irritation of it by acids, or by a needle dipped in nicotine. The alteration was diffused in the whole length of the medulla; first it appeared on the posterior cord, at the level of the origin of the nerve injured, afterwards it invaded the gray substance. "*In all the cases,*" says this author, "*it above all affected the external and posterior group of the anterior cornu, and the cells of this group only were altered when the lesion was less pronounced.*"

The medullary alterations observed by Feinberg, although the description is given with less particularity, are of the same nature. In three of his experiments, by means of irritation of the sciatic with

potassa, he found a diminution of the consistence of the medulla, above all in the gray substance of the lumbar region. Under the microscope, the gray substance appeared completely disorganized, and in part the white substance also. In the experiment of Tiesler, before cited, the medulla, at the point corresponding to the emergence of the irritated nerve, was softened and infiltrated with granulous bodies and leucocytes.

On the contrary, Klemm only once met with myelitis as a consequence of irritation of the sciatic; the inflammation, in his experiments, appeared to be constantly limited to the meninges.

The experiments hitherto cited show that the irritation of a nerve on the periphery may give place, at one time to a spinal pachy-meningitis, at another to a spinal meningitis, and again to a myelitis. But it is asked, What is the path taken by this inflammation in order to be transmitted to the medullary axis?

Klemm injected into a rabbit, with the syringe of Pravaz, some drops of a solution of arseniate of soda, into the sheath of the sciatic. The irritation thus provoked at the point of application was propagated thence to various points of the nerve, both above and below. There was thus formed an ascending and descending neuritis, proceeding by bounds here and there, in a manner very irregular, along the nervous cord, especially showing itself at those points where the arterial vessels penetrate the sheath of the nerve. This was called by Klemm *disseminates neuriti*.

Niedieck, in his experiments, found analogous results. He cauterized the sciatic with nitrate of silver and with chromic acid; the primary alteration was a focus of suppuration at the point of application of the caustic, and, next, the inflammation was propagated in patches along the nervous trunk.

Finally, in 1874, Hayem, who had regarded the neuritis of the upper end at the point irritated as exceptional, established himself, the fact of inflammation of the interfascicular conjunctive tissue along the nervous cord. He saw the cylinder axis swollen and beaded, in granulous degeneration, with proliferation of cells. It appears, therefore, that the irritation is propagated by means of the centripetal cord, following the conjunctive tissue and the nervous tubes into the central cells.

These are the facts obtained by experimental pathology on animals, and we shall now seek to compare them with the phenomena of the same order observed in human pathology.

2nd. *Clinical facts.*—In this division of the chapter we shall show that centripetal irritation of nerves is often, after some time, followed by, at one time signs of muscular atrophy, at another by signs of locomotor ataxia—phenomena which supervene on defect of anatomical control, and in themselves prove the central lesion.

One of the most notable consequences of experimental neuritis propagated to the medulla, is the *rapid muscular atrophy* observed in the animals operated on. This modification in the nutrition is in *rapport* with the degenerative alteration described by Hayem in the cells of the anterior cornua; this shows the trophic influence of these cells. Now it is certainly worthy of attention that in clinical observance the phenomenon most frequent in centripetal irritation of the spinal axis is exactly atrophy of the muscles.

Vulpian speaks of a soldier who, in 1870, received a gunshot wound at the union of the inferior third with the middle third of the right leg. At the end of a month he recovered and resumed service. In 1875 he perceived a sensation of formication and of stunning at the point of the cicatrix, and afterwards enfeeblement in the whole limb. At the same time he discovered that the whole member affected was continually becoming more atrophied. The circumference of the right thigh was four centimetres less than that of the left one.

Hayem publishes a similar case, in a man who received a gunshot wound in the leg in 1871, and in 1874 signs of atrophy and paralysis were manifested. In these observations the muscular atrophy shows the seat of the lesion to be in the gray substance of the medulla.

We shall record other examples in which the paralytic and atrophic manifestations were produced in regions far from the member primitively injured. Thus Charcot, in 1856, records the case of a man who had diffused phlegmon in the *left* forearm, for which some incisions were made by a surgeon; one of these incisions fell upon the radial nerve. A short time after, the patient began to feel pains and formication at the point of the cicatrix

corresponding to the radial nerve; then followed anæsthesia and paralysis, with atrophy of the muscles. At the end of about a year, he felt a weakness and torpor in the *right* forearm.

Vulpian, in the Hospital La Charité of Paris, observed a fact of the same order. A man suffered a scalding of the left hand, such as to destroy it, leaving to him only two fingers in the form of pincers. After some time the right arm weakened and atrophied; and afterwards, despite of faradization, the muscular atrophy progressed to the muscles of the arm and the shoulder. Brown Sequard, Leyden, LeDentu, and Ferrier report other examples of the same order. But the finest example of atrophy and paralysis is that of Pincet, of Cluny, in which the progressive extension of the lesions into the greater part of the medulla was observed. A soldier, in 1870, received a wound in the battle of Sedan; a ball which penetrated at two centimetres to the right of the sternum, went out at three centimetres below the spine of the scapula. The patient remained three days unconscious. On reviving, the right arm was seen paralysed. The wound healed in eight months, but notwithstanding the use of faradization, the arm remained paralytic.

In 1873 this patient entered the Hospital Val de Grace. The left arm was enfeebled, and had become similar to the right. In 1875 the lesion was perfectly symmetrical in both upper members; there was atrophy of the pectoralis, trapezius, deltoid and great dorsal muscles; also of the biceps, the anterior brachial, and all the posterior muscles of the forearm.

We cite, finally, two other examples, with anatomical observations. Leudet relates a case of sciatic neuritis, developed by asphyxia from the oxide of carbon. He saw, eight days after, a weakening first in the member corresponding to the neuritis, and afterwards in the member of the opposite side, and thence to the upper members, supervening. At the autopsy, neuritis of the right sciatic was realized.

Professor Duménil relates a case in which, following a contusion of the right sciatic at the nates, paralysis with atrophy and anæsthesia in the right limb was observed; in a year after, the upper limb of the same side was similarly affected. Three years after, the lower limb of the *left* side was affected in its turn, and afterwards the upper one. Finally, the tongue also was involved. The autopsy showed chronic neuritis of the sciatic, and medullary lesions, chiefly in the posterior cornua; the vessels were dilated and varicose, there was infiltration of granulous globules with hyperplasia. The white substance was little or not at all altered.

From these anatomical observations, and many others made by Vulpian and Dickinson on persons who had undergone amputations at remote dates, it has been shown that in the posterior parts of the medullary axis the centripetal irritation has principally its seat.

It is also known, from the observations of Hayem, that the inflammation is propagated across the internal radicular fibres to the externo-posterior cellular group of the anterior cornua. Unless it be now forgotten that ascending lesions in the spinal axis are effected by means of the posterior cords, we have quite sufficient to enable us to account for the cases of locomotor ataxia, which sometimes supervene in sequence to inflammation of the peripheral nerves. Here are some examples: H. Petit relates the case of a man who, in November, 1859, suffered a contusion in a toe of the left foot, from a bar of iron falling on it. In February, 1860, he had lancinating pains in the left foot and leg, and a short time after, pains also in the right, but lighter, so that they yielded to a little rest. Progressive evolution of symptoms of ataxia followed. M. Duplay published in the *Archives of Medicine*, the case of a man who, in the Crimean war, had a foot frozen, and was afterwards taken with fulgurant pains in the lower limb, and at a later date with ataxic titubation; in 1875 all the classic symptoms of sclerosis of the posterior cords presented. Nicaise observed an analogous case in the hospital of Bicetre.

It may be admitted that in these cases the freezing, or the wound, determined a neuritis of the cutaneous nerve branches, next in the principal trunks, and thence into the posterior parts of the medulla.

Another example has been published by Prof. Vulpian: A man, in 1855, underwent amputation of the right leg. In 1873 the left leg became, by little and little, weak and flexible. The foot, in walking, was thrown inwards. A year after, fulgurant pains in the left inferior limb supervened.

In 1877 it was observed that this member had emaciated in its whole bulk. With the eyes shut, he walked hesitatingly. Sensibility was diminished, and the fulgurant pains were severe. On the side operated on, nothing analogous to what happened on the sound side was observed.

In summary then, all the facts which we have passed in review demonstrate :—

1st. That the peripheral irritation of a nerve may determine in the nervous cord, and in the central axis, inflammatory modifications. 2nd. That these inflammatory lesions are produced either in the involucres of the medulla, or in those of the nerve ; on the constituent elements of the conducting cord, and of the medullary axis. 3rd. That the medullary lesions have their seat principally in the grey substance, but they may extend also to the white substance. 4th. That they may be limited to the meninges, according to the observances of Klemm. 5th. That in the majority of the cases, if not in all, the propagation of peripheral irritation to the medulla is effected by means of the centripetal cord, under the form of a neuritis, now disseminate, or again continuous, having its seat in the interstitial connective tissue, and probably also in the nerve tubes. 6th. That these central lesions are often manifested with predominant muscular atrophy, and in some cases with signs of locomotor ataxia.

B. *Lesions central, produced by irritation of visceral nerves.*—We are now interested in seeing whether lesions of the internal organs may bring about consequences on the nervous centres, in the same manner as the peripheric lesions of members. A great number of facts published under the name of reflex or sympathetic paralysis, have no other known pathological mechanism.

It was observed in an individual who for several years had suffered under an affection of the urinary passages, that without appreciable cause a dorso-lumbar myelitis more or less rapidly was developed. Gull, combating the vaso-motor theory of Brown-Sequard, showed that urinary paraplegia supervenes principally in those individuals who, for several years, have suffered from vesical or urethral diseases. Leyden records an observation, in which, in sequence to a cystitis from cold, with retention of urine, symptoms of paralysis appeared at the end of four weeks; at the autopsy there was found a red softening of the lumbar medulla. An Italian author, Namias, observed a case of central atrophy of the medulla, consecutive to a chronic enteritis, in a woman of 38 years.

Wier-Mitchell says that, in some cases observed by him, "*intestinal diseases had produced effusions and medullary softenings*," and that the scrofulous and the scorbutic are often subject to softening and chronic myelitis. But he does not give any details, nor cite any autopsy. Leyden has published his observance of a man, who, in sequence to dysentery, had symptoms of a lumbo-sacral neuritis, to which there succeeded those of an ascending spinal meningitis, mounting up to the superior dorsal region. In a memoir of Zabriskie, we read the following fact : A boy entered the hospital with chronic diarrhœa, which had so weakened him that his lower limbs had become paralyzed both in sensation and motion ; his evacuations passed involuntarily, and he died from marasmus. The intellectual faculties had remained sound. At the autopsy, extensive lesions were found in the small intestines. The medulla and its involucres did not present, to the naked eye, any alteration. All the viscera were sound. But though the author realized the integrity of the medulla by the naked eye, the complete paralysis of sense and motion, and the paralysis of the sphincters, prove the existence of lesions in the grey substance of the medullary axis, which would not have escaped microscopic examination.

All these facts, above exposed, establish, though not in a very definite manner, the possibility of medullary lesion as a consequence of inflammation of the viscera. But as yet the studies have been rather defective : there have been observed only these few cases in the urinary and intestinal organs, of medullary affections consecutive to irritation of the visceral nerves. As regards lesions produced by irritation of the other viscera, no example is known.

It remains also to know by what mechanism the visceral affection is transmitted to the central nervous system. Gull admits that the inflammation may be propagated, in certain cases, by the veins, to the rachidian plexuses, and thence to the involucres of the medulla. But the more rational hypothesis is that offered by Leyden, and supported by Charcot, that is, the centripetal propagation of the irritation through the nervous trunks ; and this accords with the observations of Leyden, who, in

several cases of urinary paraplegia, and in one case of dysenteric paraplegia, found, in addition to dorso-lumbar-myelitis, neuritis of the branches of the lumbo-sacral plexus.

(To be continued).

QUARTERLY REPORT ON THE PROGRESS OF MEDICAL SCIENCE.

BY J. STEWART, M.D., ETC., BRUCEFIELD, ONT.

THE TREATMENT OF EPILEPSY.

(1). *Bromides.*—M. Hublé, under the direction of Bourneville, has employed the monobromide of camphor, bromide of zinc, bromide of arsenic, and the bromide of sodium in cases of epilepsy, where the bromide of potassium given for a lengthened period failed to be of any service. The patients were all inmates of the Salpêtriere. The cases were mostly aggravated ones in old people.

The following are the results obtained by Hublé: The *monobromide of camphor*, given in doses of 10 to 60 grains in capsules, is especially useful where vertigo is a prominent symptom. It produces a profound sedation, which prevents the diverse nervous manifestations which accompany the attacks, such as insomnia, post-epileptic delirium and maniacal excitement. It was never found to cause bromide intoxication.

Bromide of zinc is a powerful sedative, especially to the medulla and spinal cord. It has a similar action to the bromide of potassiam, but it has fewer inconveniences. Given in doses of 50 to 60 grains per day, it was found never to cause cachexia or cutaneous eruptions.

The *bromide of arsenic* has also been successfully employed in diminishing the frequency of the epileptic paroxysms. It can be given in doses up to one grain without producing any inconvenient symptoms.

The *bromide of sodium* causes, in very large doses, cachexia, but never the profound cachexia which is induced by large and long-continued doses of the potassium salt. Of all the potash salts, the bromide has the most deleterious influence in this way. In many cases the bromide of sodium had a very beneficial influence.

Hublé does not draw any comparison between the four different bromides, as he thinks his number of observations (46) are too few to warrant any conclusions as to their respective merits.

(2). *Statistics as to the influence of the bromides in epilepsy.*—Ferrand gives details of 89 cases of epilepsy treated by bromide of potassium. In 12 cases a complete cure is said to have resulted. Considerable improvement followed in 51 of the cases, a slight improvement in 16, while 10 were made worse or not influenced by the drug. The bromide was given to females in doses of 75 to 90 grains per day, and to males in doses of 90 to 120 grains daily. After a case is free from fits for one year, the drug is given during six days of the week, and towards the end of the second year it is given three times a week. Ferrand prescribes arsenic in conjunction with the bromide, to prevent the development of acne, and when the bromide dose exceeds 100 grains daily, he gives coffee to prevent its soporific effects.

Hughes Bennet has published the results of the treatment of 117 cases of epilepsy. In 14 cases there was a complete disappearance of the fits, a diminution of them in 97 cases, no change in 3 cases, and 3 cases were made worse. Bennet gives 30 grains of equal parts of the bromide of potassium and ammonium in infusion of quassia, three times daily. If these doses are not sufficient, they are gradually increased until 80 grains three times a day can be taken. Of all chronic nervous diseases, Bennet considers epilepsy the most amenable to treatment.

(3). *Atropine.*—Laskiewicz considers that atropine is the best treatment for epilepsy, when the bromide of potassium fails. Köllner has lately used atropine in the treatment of epilepsy, also. He injects subcutaneously a milligramme ($\frac{1}{64}$ gr.). It appears to have a considerable influence, not only in preventing frequent attacks, but also in mitigating the severity of those which do appear. In the period between the fits, Köllner considers that the mental condition of those treated by atropine is much better than those treated by bromide of potassium.

(4). *Curare.*—Edlefsen, of Kiel, has used curare in 13 cases of old and severe epilepsy. In 6 little or no effect was noticed, 3 cases were completely cured, and 5 were considerably improved; the 13th case was still under treatment.

Prof. Benedikt, of Vienna, has also lately used curare in a few cases of epilepsy, with success. Owing to the exceeding diversity of the strength of different samples of curare, great caution is neces-

sary in prescribing it. It can be given subcutaneously in doses of $\frac{1}{30}$ to $\frac{1}{20}$ of a grain.

(5). *Picrotoxine.*—Conyba relates the case of a child, æt. 5, who was epileptic from her second year and who had been treated by bromide of potassium without success. Picrotoxine was given in doses, at first, of one milligramme, and afterwards increased until 2½ milligrammes were taken in the day. The attacks gradually diminished, and were replaced by vertigo. The picrotoxine was continued for four years. In 1880 she was considered completely cured.

THE TREATMENT OF PNEUMONIA.

(1). Prof. Picot, of Bordeaux, in his work lately issued, lays great stress on the *role* which alterations of the heart play in pneumonia. He states that all his fatal cases presented some heart change. There was either fatty or pigmentary degeneration, the lesion being generally more advanced in the right than in the left ventricle. He condemns the expectant treatment. Although the tendency of a pneumonia is to a cure, still in great measure the result depends entirely on the resisting power of the patient. In treating a case of pneumonia, we endeavor to do two things: (1) to minimize the effects of the disease, and (2) to increase the resisting power which the patient is possessed with.

In speaking of blood-letting as a means of fulfilling the first indication, and thereby preventing that acute fatty cardiac degeneration which is the great factor in bringing about a fatal issue, Picot says that he always uses this means of lowering the blood-pressure in previously healthy adults. When, however, his patient is either old or young, or affected with any cachexia, he avoids it. He considers that cupping is a valuable therapeutic agent in pneumonia. He relies principally on digitalis, alcohol and quinine. Pneumonia of the apices, he considers, happens only in the debilitated and cachetic, and gives alcohol and quinine freely. If the resolution of the hepatized parts is delayed, he considers blistering a valuable means of promoting it. He only mentions tartar emetic to condemn it. In short, the following are Picot's conclusions:—*No* expectancy, *no* tartar emetic, *no* bleeding, except in robust subjects and in cases of urgent dyspnœa from an over-burdened right heart. In the beginning, digitalis and cupping; later, alcohol, quinine and digitalis. Blistering if necessary.

The treatment of Pneumonia by alcohol.—Dr. Alix, senior physician to the military hospital at Toulouse, compares the treatment of pneumonia during several years at this hospital. During 1875 and the three following years, there was under treatment in this hospital, 230 cases of pneumonia. Of this number 20 died, being a death rate of 8.9 per 100. The treatment pursued in these cases was the ordinary one, without stimulants. In 1879 and two following years, 75 cases were admitted and treated by alcohol alone, without a fatal result. During the same years there was admitted into other military hospitals, from the same corps d' armeé, 195 cases of pneumonia. Of this number 15 died, being a death rate of 7.3 per 100. Alix considers that this difference is in a great measure due to the treatment, for the soldiers were recruited in the same district and were under the same hygienic conditions. In severe cases and double pneumonia, digitalis is given in moderate doses at the commencement of the disease, in addition to the alcohol. The object in giving digitalis at the beginning appears to have been with the view of reducing the temperature, rather than of acting as a tonic to the heart. In considering the value of this treatment, it should be remembered that the patients are men from 20 to 25 years of age, and they are admitted into hospital very early in the disease. It cannot be expected that any civil hospital could present such returns.

The treatment of Pneumonia by the employment of the wet sheet.—Dr. Austin Flint gives the details of four cases of pneumonia successfully treated by the application of cold. The cases were picked ones, the patients being robust and no complications existing. The directions were to employ the wet sheet whenever the axillary temperature exceeded 103° Fahr. "The patients were wrapped in a sheet saturated with water at a temperature of about 80° Fahr., the bed being protected by an india-rubber covering. Sprinkling with water of about the same temperature was repeated every fifteen or twenty minutes. If the patient complained of chilliness, he was covered with a light woolen blanket, which was removed when the chilly sensation disappeared. The patient remained in the sheet until the temperature in the mouth fell to 102° or lower, care being taken to

watch the pulse and other symptoms. When the temperature was reduced, the wet sheet was removed and resumed if the temperature again exceeded 103° Fahr."

Flint in speaking of these cases said, "they certainly show that in cases like those which were selected, the treatment is not hurtful. More than this, they render probable the inference that the disease was controlled and brought speedily to a favorable termination by the treatment. They also go to show that the disease is essentially a fever, and that treatment is to be directed to it as such, and not as a purely local pulmonary affection. It remains to be determined by further observations, how often and to what extent this method of treatment has a curative efficacy. It is also an important object of clinical study, to ascertain the circumstances which render the treatment applicable to cases of pneumonic fever, and on the other hand, the circumstances which may contra-indicate its employment in this disease."

A NEW BLOOD-CORPUSCLE.

According to Bizzozero, if the circulating blood in the small vessels of the mesentery of chloralized rabbits or guinea-pigs is observed under a high power, there will be seen besides the ordinary red and white cells, a third form of corpuscle, which is colorless, round or oval, and from one-half to one-third the size of the red corpuscle. Bizzozero says that it is owing (1) to their want of color and translucency, that they have hitherto escaped the notice of observers. (2) They are less numerous than the red and less visible than the white corpuscle. (3) Owing to the great difficulty of observing the circulating blood in the small vessels of the warm-blooded animals. They can be seen also in freshly-drawn blood, for the most part aggregated around the white corpuscles, or immediately under the cover-glass to which they adhere. They soon become granular and give rise to what is called the granule masses. Through appropriate reagents, their form can be preserved. A solution of salt colored with methyl-violet, has this property. The best method of examining them in the human subject, is to place a drop of the above colored solution over the puncture and mixing the drop of blood thoroughly with it. Owing to their typical forms, it is very unlikely they are derived from the red corpuscles.

The colorless corpuscles contain no ingredients from which they could be derived. After bleeding, and in many diseased conditions, they are increased in number. They play an important part in the formation of thrombi and the coagulation of the blood. They form the principal part of white clots in mammalia. It is probable that they play the *role* in the coagulation of the blood which has been attributed by Mantegazza and Schmidt to the white corpuscles, because the latter are few in number in the circulating blood, and their destruction was never observed by Bizzozero, provided the blood was mixed with a saline solution. Again, the time at which coagulation sets in, corresponds very closely to the time that these new corpuscles undergo degeneration. The fluids which retard or prevent coagulation—as solutions of carbonate of soda and sulphate of magnesia—have the same action in preventing the granular degeneration of these corpuscles. The indifferent solution of salt does not preserve them, but one to which the methyl-violet has been added does.

From this evidence it appears as highly probable that the formation of fibrine takes place, under the direct influence of these corpuscles. To them Bizzozero gives the name of "Blutplättchen."

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ARSENICAL POISONING.

BY A. C. BOWERMAN, M.B., BLOOMFIELD, ONT.*

Mr. President and Gentlemen,—In calling your attention to the subject of "Arsenical Poisoning," and in presenting notes of one or two cases that have fallen under my own observation, it has not been my object to offer any original suggestions of a therapeutic value, or to point out any new diagnostic signs by which this grave condition may be recognized. I desire briefly to notice some of the chief sources through which arsenic is disseminated, to show you that poisoning by this metal is of more frequent occurrence than is suspected; and to urge the advisability of precautionary measures to prevent the distribution of this and every other poisonous material without the necessary warning to the intending purchaser.

In considering the wholesale use to which this agent is put in the arts and manufactures, it is a matter of considerable susprise that its deleterious influences are not more widely recognized and better understood. Perhaps indeed if this subject received the attention which I think its gravity demands, many of those distressing affections which now pass under the head of dyspepsia, catarrhal attacks, general malaise and debility, would be recognized as produced by contact with articles saturated with arsenical pigments, or from breathing an atmosphere laden with microscopical particles of this poison in the form of dust. It has been said that "the special province of the physician is to diagnose disease," and the cases to which I refer are of a nature requiring professional observation for their detection. Once having recognized them and their origin, we can have little difficulty in removing them and arresting the progress of their pernicious influence. You must not understand me to mean that every apparently unaccountable ailment is the result of contamination with this noxious metal; but once let us fully realize what arsenic may do, and what it has every opportunity and encouragement for doing, and I am convinced we will scan more closely and study more diligently many perplexing cases that now baffle both our diagnostic and therapeutic skill.

I am well aware that arsenic ranks high as a medicinal agent, and has long been held in good repute and been largely administered by the profession; but I understand it is lately becoming an article almost indispensable to the ladies' toilet. I have the best authority for saying that in the administration of arsenical preparations much depends on the idiosyncrasies of the individual, which differ greatly in different persons. These facts, says Bartholow, should not be forgotten in prescribing strictly medicinal doses. Now if so much care is required on the part of persons educated in the use of this agent, what must be the danger those persons expose themselves to, who prescribe this article for their own indiscriminate use, either internally or as a cosmetic externally, and are ignorant alike of its virtues and its virulence?

It is well known that the wilfully suicidal subject is protected and prevented from inflicting self-injury; the would-be murderer is lodged in safe keeping when his propensities are discovered; yet by a species of passive mental amaurosis on the part of the legislative authorities, the greatest possible encouragement is extended to those who expose the element of disease among our scattered and unsuspecting populace. The truth of this assertion will be plain when I state that the most common channel through which arsenic finds a ready entrance into every household is through the employment of wall-papers, calicoes, and other domestic fabrics, which are very frequently coloured with arsenical pigments. Among other articles which are coloured with this metal, according to the authority of Mr. Hogg, of London, I may mention chintz, silks, muslins, ribbons, stockings, gloves, artificial flowers, American cloths, lamp-shades, candles, playing and trade cards, ornamental boxes and wrappers, children's toys, and even sweetmeats. French chalk has been taken in mistake for prepared chalk, and this same French chalk was shown to contain 40 per cent of arsenic. According to the same authority "the almost universal use of poisonous pigments in the arts and man-

*Read before the Quinte and Cataraqui Medical Association, February 1st, 1882.

ufactures is known to be productive of a two-fold noxious influence; first on the work-people employed in their manufacture, and secondly on a very much larger number of persons who purchase them, and being quite ignorant of their nature, adorn and surround themselves and their homes with the elements of disease. Now if this be true, while we are purifying our walls and writing elaborate treatises on "drainage and ventilation"; while we are spending hundreds upon the construction of elegant and effective traps against sewer-gas, would it not be praiseworthy if our attention were likewise directed toward securing for our atmosphere an equal purity and immunity from poisonous contamination from other not less deleterious channels?

It has been said, and sung too, that "The old Oaken Bucket" of Eliza Cook fame, was no more than a pestilential, germ-producing old relic, more to be condemned than venerated because it impregnated the water with vegetative organisms; yet who ever thinks upon entering an elegantly furnished room that perhaps a more subtle poison permeates every cubic foot of the atmosphere of that apartment than all the bacteria the old bucket ever grew? Mr. Hogg in speaking of the separation and diffusion of arsenic into the air of a room the walls of which are hung with arsenical paper, remarks that "it may be thought that the quantity given off is too small to produce symptoms of poisoning. But this, he adds, is a hasty conclusion to arrive at, for on analysis, Dr. Alferd Taylor found that from each square foot of an arsenical paper examined by him, he was able to produce from 13 to 17 grains of arsenic; and from certain papers printed with a peculiar pigment he obtained as much as fifty-nine per cent of arsenious acid. According to the same authority, arsenic finds its way into almost all papers independent of colour, and in this way "the size used for fixing the pigment on the paper is very prone to decomposition, to prevent which makers introduce arsenic. Mr. Henry Carr, of London, likewise quoting from Dr. Taylor, says: "The pigment of arsenicated wall-papers contains a large proportion of arsenic, and from some of these papers in the unglazed state, the noxious material may be easily scraped or removed by slight friction; thus arsenic is liable to be distributed through the air of a room in a state of fine dust." He further adds that Dr. Taylor was able to detect the presence of this poisonous dust on books, picture-frames, furniture, and projecting cornices of rooms thus furnished. One gentleman who had his library hung with arsenicated wall-paper suffered from symptoms of arsenical poisoning which came on after he had been occupied in dusting his books and on examination a well-marked quantity of arsenic was found in the dust.

As I stated at the outset, I have no intention of offering any remarks relative to the remedial value of arsenic, on the contrary I shall feel my efforts well repaid if I am able to interest you with some of the abuses of this article. The following symptoms obtain from exposure to poisoning by arsenical dust. The earliest indications of the absorption of this poison, most frequently observed, is an excessive irritation of the whole of the mucous tract and which is generally referred to a catarrhal attack. Improvement following remedial measures are temporary. More frequently as the nasal irritation subsides, a feeling of faintness, headache, and great prostration ensues, and the patient who tries not to think himself very ill is obliged to lay up. In other cases the first symptoms are dyspepsia, stomach-derangements and cramp referred to "bilious attacks." Diarrhœa may supervene upon sleeping in a room newly papered; while headache, sore throat, smarting and running of the eyes will supervene upon awaking from this unrefreshing slumber. Breathing the air of a room after the daily operation of dusting has been performed, produces an aggravated hay-fever, spasmodic asthma and bronchitis. In other instances fainting fits, vomiting, diarrhœa, nervous prostration, skin eruptions, conjunctivitis, dimness of sight, paralysis, etc., follow in regular sequence. All of the above and even many more distressing complaints result from wall-paper poisoning. And Mr. Hogg gives it as his opinion that the danger to public health is quite as great as that arising from sewer-gas or impure drinking water. Possibly no better proof of arsenical poisoning would be desired, than a rapid recovery from the symptoms upon removal of the supposed cause. A few well authenticated cases may suffice to illustrate the frequency of this condition.

"A member of the British Parliament suffered for months with a painful eruption of the feet, which confined him to his couch. Abandoning his

fashionable socks, he quickly recovered. Several Californian miners actually died from wearing boots lined with bright green flannel the colouring matter being Scheele's green. An otherwise healthy tradesman suffered from wearing a bright maroon flannel next his skin. Poisoning has frequently occurred from wearing paper collars, coloured calico shirts, gloves, coat-sleeves and hat-linings. A lady suffered from a painful skin-disease from carrying around a bright yellow purse, whilst another suffered from the dye which came off the black crape dress she was wearing. Several members of a family were made severely ill by the chintz window curtains and bed-furniture of the room they occupied. Another family were poisoned by green venetian blinds. A lady suffered many weeks from a troublesome eruption of the scalp from wearing artificial flowers in her cap. Illness in children has been caused by the cloth lining of their perambulators. Eye diseases have been produced by green shades to the gas lights used in composing rooms. Distemper colours on office walls have injured the health of clerks. The daughter of an official in high life in Vienna, recently wore several times a superb dress of dark green material, trimmed with wreaths of leaves in another and lighter shade of green. During the season the beautiful complexion of the young lady underwent a sudden change, and was ruined by a painful and offensive eruption. After a time her physician, baffled by the symptoms, thought of the dress, had it subjected to a chemical examination and found enough in the colouring to produce all the mischief.

Prof. Roscoe, in his elementary chemistry, says: "All the soluble arsenites are dreadfully poisonous. Alkaline arsenites are soluble in water, and sodium arsenite is used largely in calico printing." This then may be another fruitful source of contact with this metal, both in the wearing and the washing of calicoes which are so widely used. He likewise says: "The employment of arsenical wall-papers is much to be deprecated; still more is the insoluble arsenical green for colouring light cotton fabrics such as gauze, muslin or calico to be condemned, as the colour is merely pasted on with size, and rubs off with the slightest friction." It may be information to some of you to know that confectionery-chocolates, gelatines, etc., are very frequently coloured with arsenite of copper. A mistaken impression prevails that green papers and fabrics alone are dangerous. The fallacy of this notion has been shown on examination of blue, mauve, red, brown, and even white papers, which were found to be arsenical.

Another class of poisonous dyes has also been added with the introduction of aniline colours, affecting more particularly articles of dress. Arsenic is likewise employed in the manufacture of both aniline and indigo dyes, and is present in such a variety of disguises as to render its detection by the public quite out of the question. Aniline dyes are poisonous of themselves, regardless of the arsenic they may or may not contain. Aside from the list of quoted cases and their relative causes, we are all well aware of the extensive use to which arsenite of copper has lately been put in the extermination of the Colorado beetle, the tomato and the currant worm, to say nothing of the danger run by those who apply this substance either in powder or solution, Are there not a thousand chances in which valuable lives may be carelessly sacrificed through partaking of garden fruits fresh from the bushes, thus diligently medicated? I do not mean to say that gardeners are careful to dust or sprinkle the fruit alone. It is the leaf only that is attacked by the caterpillar, and it is the leaf that is aimed at with the exterminator, but I think you would find it a tedious process to do justice to the leaf and avoid the fruit. Gardeners might do well to suspend notices to their bushes warning the trespassing public that their inviting fruits are both seductive and unsafe; but it must not be forgotten that the incautious aud unwary child is the victim most likely to be caught in this unsuspected trap. Perhaps it might be just as wholesome to eat a caterpillar now and then, as to preserve the fruit at the expense of one's own or another's life.

(To be continued.)

LACERATION OF THE PERINEUM AND SPHINCTER ANI COMPLICATED BY A RECTO-VAGINAL FISTULA.

BY J. E. BROUSE, M.D., BROCKVILLE, ONT.

On the 15th of November last I received a note from Dr. Hanna of Lansdown, asking me if I would go there and operate on a lady, who lived three miles from the village, for restoration of a completely ruptured perineum. He stated that she had been confined only six weeks previous of her

second child, and that the accident occurred under the care of another physician nearly three years before in her first labor. Without obtaining any more particulars I agreed with her friends to operate, and went to see her on the 26th of November, prepared to do so if there was a reasonable prospect of success, and the woman properly prepared. But when I came to examine the state of the parts and saw the extent of the lesion, I regretted my promise, and were it not for the anxiety of the woman to obtain relief, twice the fee agreed on would not have induced me to touch the case, as I deemed success very problematical. During the twenty-one years of my professional life it has been my lot to see many cases of torn perineum, not only in private practice, but in the New York State Hospital for women, where I saw several bad cases operated on (not always successfully) but never had I met with one in which the original injury was so extensive as in the one I am about to describe. The history is briefly this: June 22nd, 1878, pains began at 6 a.m. very light until 1 p.m. when they became more regular and strong. Membranes ruptured at 2 p.m., from that time until 7 the pains were quite strong. Between 7 and 8 they were feeble with long intervals. The physician in attendance applied the forceps and the child was born in a few minutes. The next day the doctor put in three sutures leaving them in fifteen days, at the end of which time no union had occurred. Ever since then she has had no control of the bowel, both flatus and fæces passing in spite of her every effort. The fæces also pass into the vagina, obliging her to wash out the part frequently. Although only 23 years old her life has become a very burden, and rather than continue an object of disgust to herself, she is willing to submit to any operation that will afford the slightest prospect of relief.

Placing her on a table in good position before the window, I saw a widely gaping cavity into which could be put an ordinary sized goose egg, without stretching the parts in the least. The perineum was entirely wiped out of existence, the sphincter ani torn through and lying at the lower or posterior margin of the anus (which was open) with its inner fibres contracted and the ends marked by a distinct pit on either side. A band of skin and mucous membrane one-eighth of an inch in diameter had united in front of the anus thus converting what had originally been a rent into a recto-vaginal fistula of over an inch in extent. On passing my left index finger into the rectum and lifting up the posterior vaginal wall, a cicatrix, at the junction of the left lateral with the posterior wall, fully three inches long and extending nearly into the cul de sac, was discovered. The original rent had been through both the vaginal and rectal tissues and in uniting had bound the parts so tightly down that it was almost impossible to raise them sufficiently to get a good view. In order to have the patient in as good a condition as practicable I deferred the operation for ten days, in the meantime ordering such diet as would, in the process of digestion, leave the least debris, and giving instruction to have her bowels freely opened by cathartic pills each day until the ninth when an opiate was to be given so as to lock them up.

On the 6th of December, hearing from Dr. Hanna that the patient was ready, I went up, accompanied by my friend Dr. Vaux, who kindly offered to assist, and operated. I first washed out the rectum with carbolized warm water, but the opiate not having had the desired effect nearly an hour was consumed before the water returned clear. Dr. Lane of Mallorytown gave the anæsthetic, using Squibbs ether, while Drs. Hanna and Vaux kept the parts on the stretch and did the sponging. First marking the points on the posterior wall of the vagina and on either labium to which the denudation was to extend, the operation was begun by picking up the skin with a tenaculum at the left extremity of the spincter on a line with the posterior margin of the anus and freshening the end of the muscle with the scissors. Then a narrow strip of mucous membrane was denuded completely around the fistula (which was converted into a rent by dividing the narrow band at its lower margin) and down the right side to the other extremity of the muscle. In this manner strip after strip of mucous membrane was removed from the side and posterior walls of the vagina, the greatest difficulty being experienced in getting at the parts bound down by the cicatrix, and it was only by exercising patience that it could be accomplished. To add to the trouble the bowels, notwithstanding the opiate, kept moving every eight or ten minutes during the whole time, occasioning a great deal of delay in cleansing. Having reached the points marking the limit of denudation, the first suture

was put in by entering an ordinary two inch needle, threaded with silk to which a silver wire was attached, below the sphincter close to the left side of the anus, and carrying it up in the cellular tissue to a point one-fourth of an inch above the limit of the rent, then around it and down the right side to a point exactly opposite that of entrance. The second suture was entered on the same plane, catching the end of the muscle and following a course parallel to the first and one half inch higher up. The third passed directly across the upper margin of the anus and under the first two so as the more effectually to bind the muscle in its place, when brought into position. The fourth, fifth and sixth sutures were entered about half an inch from the edge of the left labium, passed back through the tissue of the lateral wall, then through the tissue of posterior wall in front of the rectum and out through the right wall to a point opposite that of entrance. The sutures were about half an inch apart.

By taking an end of wire No. 1 in either hand and pulling, at the same time pushing up the spincter with the index fingers, the muscle was made to encircle the anus and was secured by a couple of twists of the wire. Suture No. 2 brought the outer fibres of the severed muscle in contact. No. 3 was put in at the suggestion of Dr. Emmet, to whom I had shown a rough sketch of the parts when in New York the previous week, and I have no doubt that it added materially to the success of the operation by effectually keeping the muscle in position. Nos. 4, 5 and 6 brought the sides and posterior wall in contact, thus completely restoring the perineum. In twisting the sutures care was taken to do no more than bring the parts in contact so as to lessen the danger of cutting through or producing strangulation when swelling occurred. The sutures were left three inches long and secured together by a piece of rubber tubing over the ends and wrapped with wire. All blood stains were now washed away, the thighs tied together, a soft pad being placed between the knees, and the patient put to bed. The operation lasted one hour and thirty minutes, but, had it not been for the trouble given by the old cicatrix and the continued action of the bowels, it would have been done in less than half the time. An opiate was given to confine the bowels, and instructions left for a daily dose until the sixth day when an enema of warm oil was to be administered. Dr. Hanna in the meantime attending to the bladder and washing out the vagina. The same diet was continued as before the operation. The bowels, unmanageable all through, operated on the night of the fifth day, before Dr. Hanna gave the enema, and caused great pain, but did no further harm. Dec. 14th I removed the sutures and found the parts united. She was kept in bed with her thighs tied for ten days longer, when she was allowed to get up. I have not seen her since removing the stitches, but the following extracts from letters by Dr. Hanna will show her condition :

LANSDOWN, Dec. 13th, 1881.

DEAR DOCTOR,—I drove up to see Mrs. R— Friday the 16th, and after a careful examination of the parts I am of the opinion that there is not union of the sphincter ani. I hope I am mistaken, but my opinion was corroborated by yesterday's examination. There is first class union of the perineum proper, and by a digital examination in the vagina, it (the perineum) seems to be perfect in extent and symmetry. However she claims to have good control of the bowel now, and as the passage of the fæces into the vagina was her chief trouble, which will now be obviated, I have no doubt but she will feel the operation a success even if my idea be correct.

Yours truly,

F. HANNA.

In my reply to Dr. Hanna I said that he must be mistaken, for if there was no union of the sphincter there could be no control over the bowel. January 4th, 1882, Dr. Hanna wrote as follows : " In reference to Mrs. R— I am pleased to inform

you that the condition is not as I stated in my former letter. There is still a slight deficiency in the sphincter, but she says she has much better control over the bowels than formerly. When I examined her before, the defect seemed to be about ¾ of an inch, but since the swelling has disappeared the defect is only trifling and quite superficial. I think you can safely report the case as a genuine success. The family and she are thoroughly satisfied.

Yours truly, F. HANNA."

Thus has a young life been changed from a state of great misery to one of enjoyment by an operation, which, at the outset, seemed almost hopeless. It is such a success as this, occurring occasionally in the career of a medical man, that helps to cheer him when, only too often, cast down and discouraged by his failures and the unkind criticisms of those who make no allowance for any one but themselves.

Correspondence.

ELECTRICITY IN THE TREATMENT OF SPASMODIC DISEASES.

To the Editor of the CANADA LANCET.

SIR,—In a letter in the February number of the LANCET, Dr. Thos. W. Poole denies that electricity is a curative agent in spasmodic diseases, and gives, as ample evidence of the correctness of this position, a single quotation from Dr. J. Russell Reynolds' lectures on the "Clinical uses of Electricity." If Dr. Poole had continued his quotation to the end of the same paragraph, some hint would have been given of Dr. Reynolds' real estimate of the value of electricity in the treatment of spasmodic diseases, and a reply from me would have been almost superfluous. As, however, many of your readers may not possess a copy of Dr. Reynolds' admirable lectures, simple justice demands that his position on this subject should be fairly stated.

Under the heading of "General Remarks on the Clinical use of Electricity," Dr. Reynolds says, on p. 11, "There are other diseases which you cannot be said to cure, but which you may relieve by electricity. By its application you may, in many instances, again and again relieve pain; you may in like manner relieve spasm; or you may slowly diminish and even ultimately remove paralysis." Again, on page 17, he says, "This (the continuous galvanic current) will do the following things: it will relieve spasm of certain kinds; it will relieve pain of certain kinds. A person may have a particular kind of headache; you pass a continuous current * * and in a few seconds the pain is gone. It will also remove some forms of tremor and of spasm."

Under the heading of "Clinical effects of Electricity on nerve and muscle," he says, on page 23 and page 24, "Electricity may put a nerve into action." * * "Its other effect is to diminish the activity of a nerve, when that activity is normal, or in excess." * * "To the electrification of muscles, similar statements will apply." * * "When, on the other hand, muscles are contracting preternaturally, exhibiting spasm, either tonic or clonic, you may reduce this action by the continuous current," etc.

Under the heading of "Therapeutical uses of Electricity," he says, on pages 62 and 63, "Secondly, electricity may reduce, or even annihilate, for a time, the action of a nerve or muscle." * * "It you have pain, over-action, or spasm—whether tonic or clonic—you may so use electricity as to diminish those conditions and bring nerve and muscle to their normal states." On page 64 he says, "There are * * hardness of a limb, * * actual rigidity, * * tremulousness of muscles, and lastly, clonic spasm." * * "These are all signs of an over-action, that may sometimes be reduced by electricity. Again, on page 66, he says, "Over-activity of a muscle or nerve, or vessel, may be reduced by the application of the continuous galvanic current." * * "Another form of electricity —faradization—may also be employed to reduce over-activity. If you find, for example, a man suffering from torticollis—spasmodic wry-neck—the sterno-cleido-mastoid and other muscles of one side acting most violently, and turning the head over to the opposite shoulder, you may stop that by passing through the sterno-cleido-mastoid muscle a galvanic current." "Another way in which you may reduce the over-action of a muscle, is by faradizing the antagonistic muscle. Suppose the flexors of the arm are contracted, as in some cases of 'late rigidity,' and you find it difficult to get the fingers open,—the best mode of overcoming that condition is to apply faradization, not to the mus-

cles affected, but to the other muscles, the extensors, so as to antagonize them. Again, in the case of torticollis, where a man's head goes jolting over to one side, you can reduce the over-action by putting the antagonistic muscle into action by faradization, and so pulling the head round into its proper position." "There is another point to which I will now call your attention (pages 79-81), and that is the condition of 'rigidity' in a limb in cerebral paralysis. It is common enough in old cases, and sometimes is met with in those that are quite recent. In the latter case I advise you not to use electricity, for you may do harm; in 'late rigidity' you may employ it without fear and with considerable advantage." * * "Sometimes in an early stage, a few applications of electricity will cure the rigidity and not only remove the tendency to cramp, but even bring back the proper contractility of the limb." * * "You may often call into action the extensors of a much weakened hand, by applying a moderate faradization with well wetted sponges to the back of the forearm; * * faradization is much better for this purpose than the battery (constant) current, although the latter may be used to assist the former by applying it, in a continuous form, to the rigid and over-acting muscles." * "You faradize extensors, and galvanize the flexors of the hand and fingers; and you may, if the rigidity has extended higher, adopt a similar plan with regard to the muscles of the forearm or the arm."

It is quite true that up to the date of the publication of these Clinical Lectures (1873), Dr. Reynolds had not been successful with electricity, in the treatment of torticollis, writer's cramp and histrionic spasm. He admits, however, that in this respect he has not been as successful as others; he says (page 102), "Others have been more successful, and I trust your experience will resemble theirs rather than my own. Since the first edition of these Lectures was published, my friend, Dr. Geo. V. Poore, has treated cases of writer's cramp and scrivener's palsy successfully, by a process peculiar to himself. Dr. Poore has found some muscles defective in irritability, and others over-irritable. The plan which he has adopted has been highly ingenious and useful, viz., the faradization of weakened muscles, and the application of a constant current to muscles disposed to spasm, together with the employment of rhythmic movements of the limb, at the time of the latter application. (See the *Practitioner* for 1872-3). From my own knowledge of some cases which Dr. Poore has thus treated, I can speak with much confidence and hope as to the future of many forms of this disease, which had previously proved so intractable as to lead to the general expressions which I have used on the preceding page."

So much for the views of Dr. Reynolds in 1873. Whether they can be adduced as "proof" of the failure of electricity to relieve spasmodic diseases, as Dr. Poole would have us believe, or whether they rather favor Dr. Bartholow's statement, that "there is nothing more certain than the power of electricity to relieve spasm," I leave your readers to decide.

In addition to the above, and in view of the great practical importance of this question, it may be well to record the views of other authorities of recognized standing. A few brief quotations from Meyer,[1] Althaus,[2] Tibbitts,[3] and Rockwell,[4] must suffice however.

(Torticollis). "It is developed either in consequence of an asthenia (paralysis, atrophy) of the antagonists, * * in which case it is cured by the induced current being directed to the antagonists (see case 70); or it is caused, according to Remak, by a myelitis lateralis of the opposite side, * * and then it is treated successfully by removing the myelitis, through the constant current."—Meyer, page 360. "Electricity of high tension (the constant current) as a counter-irritant and induction currents methodically applied to the antagonists of the suffering muscles, have effected amelioration or cure."—Althaus, page 575. "From this treatment I have had good results in several cases of spasmodic wry-neck (torticollis); * * in these cases it is always well to combine with the charge (constant current) energetic faradization of the antagonists of the contracting muscles; and the same treatment may be followed with advantage in writer's cramp and analogous affections."—

1. Electricity in its Relation to Practical Medicine, by Dr. Moritz Meyer. Translated by Wm. A. Hammond, M.D., 1872.
2. A Treatise on Medical Electricity, by Julius Althaus, M.D., M.R.C.P. Lond. American edition, 1873.
3. A Handbook of Medical Electricity, by Herbert Tibbitts, M.D., L.R.C.P. Lond. American edition, 1873.
4. Lectures on Electricity, by A. D. Rockwell, A.M., M.D., 1879.

Tibbitts, page 143. "M. Rosenthal cured with the constant current the following case (of torticollis): * * the passing of a constant current through the affected muscles caused immediately a freer motion of the head."—Meyer, page 372. "In its earlier stages, however, it may be cured by electrical treatment alone."—Rockwell, page 60.

(Writer's Cramp). "That form which depends upon an asthenia of the extensor muscles is best removed through their faradization, while the neuritis is cured by the use of the constant current."—Meyer, page 365. "As generally all other means fail to effect a cure in this troublesome complaint, I cannot too strongly recommend practitioners to resort at once to galvanization."—Althaus, page 575. "Rest is here imperative. If in the earlier stages this is taken, and the proper electrical treatment administered, the symptoms in many cases yield readily enough."—Rockwell, page 72.

Yours, etc.,

A. M. ROSEBRUGH, M.D.

Toronto, Feb. 17, '82.

ADVICE TO YOUNG PRACTITIONERS.

To the Editor of the CANADA LANCET.

SIR,—The following letter of advice from an old practitioner to the prospective graduate in medicine may interest some of the readers of the LANCET. Yours, etc., J. W. H.

DEAR PUPIL,—It is, and has always seemed, very strange that there is not instituted a special series of lectures for the senior students of the medical schools—such lectures not to be so much directed to any particular theme, but to a consideration of ethics, in other words, the relationship of medical men to each other and to the public—to a consideration of the young practitioner's duties as a medical man and as a citizen. For example: In the first instance he might be instructed in the manner of charging for his services, and in collecting the same,—how to appear personally, what to assume in his daily life, what company he should associate with—in fact, what would entitle him to be considered a member of our most honorable fraternity, and what to avoid if he wishes not to disgrace it and himself. The reader of this might say that any one knows enough for that. I partly admit it; but you will agree with me when I say that lectures directed to the subject just before the young medico is given the long sought for honors of his degree, would be the means of directing him aright at the outset, and give a more uniform degree of dignity, than if it were left for his manhood to adopt. I also deem it the duty of our colleges to instruct students in regard to such medicines, surgical instruments and other accessories as they may need in establishing themselves in practice. I can look back some thirteen years to my commencement and see wherein I made some expenses uncalled for, associated with those whose influence and society were derogatory to myself and profession, observing not that gentlemanly seclusion which, to-day, I fully acknowledge as salutary, to a considerable extent, in every profession. As to expenses, I might refer to the needless one of having one's professional card in a newspaper. It has always seemed to me unprofessional and decidedly useless, and yet I have actually thrown—yes, tossed to the winds—some forty or fifty dollars in such advertising. I am pleased to notice that the practice of advertising is getting unpopular among the older and better class of physicians. Young practitioner, put your foot on this evil. I have also been harrassed (this word does not half express my meaning) by the travelling literary gentlemen and drug agents—the former to draw my attention to some late medical work, journal, instrument or appliance; the latter to solicit an order for some new pharmaceutical preparations. The book agent is a bore. Recently a member of this order entered my office, threw down from his arms a great roll, which, when opened, proved to be an atlas of anatomy. After the grand opening and commencement of his stereotyped appeal, I directed his attention to a combination of letters—large type, in frame—which for those of his order I keep constantly in place—NO. Reader, just adopt my simple plan. Your course will have furnished you with what works you need in practice. The United States Dispensatory is a convenient work, and from it you can actually learn more of medicine than any work I know of. I would advise you to subscribe for "Wood's Medical Library," published yearly; yet in so doing, I must admit that two-thirds of the works are useful as reference only, and make your library larger I maintain that, although the "library" is cheap, if the money for it was ex

pended for works one actually thinks, after due consideration, that he needs, it were better. Now, as to drug agents. Be careful of your orders, keep a copy for yourself, and watch the prices. You will find it also to your interest to get quotations from other drug houses. For several years I traded with a firm, and was kept constantly on my guard to keep even with them. If I had not carefully preserved my receipts, I find on looking over my books that I would have lost some seventy dollars. I was persuaded to give them another order—my last; I preserved a copy of it, and sent it to a firm not far distant to get their prices, and I was astonished to find on its return that by dealing with them I could have had the same goods for six dollars less. In purchasing drugs, I would suggest the following: Buy of the nearest wholesale druggist, keep receipts and a copy of your orders carefully; do not buy fluid extracts—make them yourself, for you can purchase for a few dollars the necessary apparatus to manufacture them. Fluid extracts are expensive to purchase and do not last longer than tinctures. Keep posted in regard to the drug market, but especially on staple drugs, and purchase a quantity when low. I have several other subjects to which I wish to draw your attention, and will write them up soon.

Yours, etc, OLD PRACTITIONER.

MEMORIAL TO THE LATE DR. ROLPH.

To the Editor of the CANADA LANCET.

SIR,—Your remarks in the February number of the CANADA LANCET anent a "Memorial to the late Dr. Rolph," were highly opportune and renewed in me a determination to ask the profession, through your journal, if something could not be done to commemorate the name of this great man. I have often thought it a lack of kindness (to say the least) on the part of the profession and especially the graduates of his school of medicine, to have allowed the matter to lay so long unattended to.

We certainly owe a great deal to the energy, determination, ability and scholarly attainments of the late Dr. Rolph, whose well stored mind and willing tongue were ever ready to advance the best interests of his chosen profession. But few of his confrères can be referred to who did so much for its interest and advancement under so many difficulties and obstacles, and I think that we who have lived to see his great work prosper should commemorate his name as a mark of appreciation of his great labors.

What particular form the memorial should take will be a subject for future consideration by the profession. The first thing, perhaps, to be determined will be, What amount of money can be raised for this purpose? The form of the memorial can be gauged by the amount to be expended. A tablet, bust, or oil painting in the College of Physicians and Surgeons of Ontario would be very suitable, but I think a more public place could be found, where not only the visitors to the Hall would see it, but the public at large. Would not the Park or City Square be a better place? These are merely suggestions.

If the former pupils and friends of the late Dr. Rolph are prepared to move in this matter, I would respectfully suggest that a committee be appointed, and that the influence of the daily papers be also secured in behalf of the undertaking. In that event I think there would be little difficulty in raising a sufficient amount to meet the requirements. There are many outside of the profession who have a kindly recollection of his amiable qualities and who would be pleased to show it by contributions, but who, if only the columns of medical journals were devoted to the subject, might not become aware of the movement.

I am also aware that the subject of this letter had his faults and his enemies, but who among us has none? Let us, however, forget the faults and remember the good qualities, and praise the noble traits, for above all his faults his great abilities soared pre-eminently aloft. Hoping that these few fragmentary remarks may be of use in opening up the way to further action in the matter, and that more able brethren may take hold with us in our feeble efforts to do honor to the memory of this great man.

I remain, yours, etc.,

D. L. WALMSLEY.

Elmira, Feb. 20, '82.

BELLEVUE HOSPITAL. Training School for Nurses gave degrees January 17th, to twenty-one nurses.

Reports of Societies.

HURON MEDICAL ASSCCIATION.

The annual meeting of the Huron Medical Association was held in Clinton on Tuesday, Jan. 10th, Dr. Sloan, of Blyth, President, in the chair.

The following members were present : Drs. Sloan, Holmes, Worthington, Hyndman, Bethune, Williams, Graham, Young, Taylor, Duncan, Mackid, Hurlburt, and Stewart.

Dr. W. J. R. Holmes, of Brussels, was appointed President, and Dr. Hurlburt, of Brucefield, Vice-President, for the ensuing year. Dr. Stewart, of Brucefield, was re-elected Secretary.

The Association decided to subscribe for one copy of the *Index Medicus*.

Dr. Mackid, of Lucknow, exhibited a married man, aged 43, farmer, who has been complaining for the last three years of severe periodical pains in various parts of his body. These pains, which are situated in his arms and legs, often last for hours. He also complains of pains of a "lightning-like" character, confined to the arms for the most part. He says his sight is dim, and often, after severe exertion, he is blind, and sees things double. He has lost all sexual desire. He is seldom able to retain his urine an hour. His bowels are very irregular. He says he is apt to stumble in the dark ; but there is no evidence of ataxia when his eyes are shut. Patellar reflex is normal. There is no paralysis of motion or disorder of sensation in the muscles of any of the extremities.

Dr. Duncan, of Seaforth, showed a very well marked example of *Jacksonian Epilepsy*. The patient is a boy, four and a half years of age, a twin, born at seven months. The premature birth was owing to an injury the mother sustained in being thrown out of a sleigh. The general health is good. Had whooping cough. There has been a purulent discharge from the right ear ever since the child was two months old.

When he was nine months old, the mother noticed that while nursing he would suddenly and without apparent cause, stretch himself back and leave the breast for a short time. From the ninth to the twelfth month there was frequently recurring attacks of ordinary general convulsions. These attacks have, however, completely passed away, The boy is larger and better developed than his twin brother. His mind is bright and active. His speech is not very distinct, however. The first unilateral convulsion occurred in June, 1878. They have recurred frequently since that time ; sometimes there will be as many as seven in one day. The individual fits occur as follows : The first thing noticed is generally that the child is in unusually high spirits ; he is restless and excited and talks strangely. About twenty minutes before the convulsive movement begins, he loses the power of the left side. The convulsions commence, sometimes in the fingers, sometimes in the toes—always in the left extremities, however. If they commence in the fingers, they travel up the arm and down the leg ; if in the leg, then up this limb and down the arm. The convulsions, after lasting a few minutes, cease ; after a short pause, they are repeated, and again cease ; and so on for four or five hours. They never become general. The tongue is protruded to the left and the eyes are turned in the same direction during the convulsions. The left side of the face and forehead get dark during the fit. After the convulsions have completely ceased, the child falls into a deep sleep, from which he awakens with completely paralysed left extremities. The paralysis passes away in from twelve to twenty-four hours. Consciousness does not appear to be completely lost during the attacks. Bromide of potassium has appeared to have prevented many convulsions which otherwise would have occurred. The above case differs from reported cases in the fact of paralysis preceding as well as following the convulsions.

How to explain the paralysis which occurs before the cortical centres discharge themselves and thereby become exhausted, appears to be difficult.

Dr. Taylor, of Goderich, shewed the following cases :

(1). Pseudo-hypertrophic muscular paralysis.

The patient is a boy, aged 16, with a good family and personal history, and who presents the characteristic symptoms of this disease in a pronounced degree. His mother states that he always had a difficulty in walking, and was constantly falling if travelling over uneven ground. His playmates styled him "Stiff-legs." The calves are three inches greater in circumference than the upper part of the thighs. The arms are an inch larger than the forearms. There is general muscu-

lar weaknrss Patellar reflex absent. The lordosis, and peculiar method of arising from the prone position characteristic of this disease are well marked in this case.

(2). Left Hemiplegia from destruction of a portion of the right cortical region of the brain—Epilepsy.

The patient, a female, aged 23, when five years of age sustained a fracture of the right side of the skull by a branch of a tree falling on her. There was loss of cerebral substance at the time. Her left arm and leg have been paralysed ever since—the arm being completely so, the leg only partially. The patellar reflex of the paralysed limb is greatly exaggerated. The left arm is atrophied and contracted. There is loss of bone to the extent of about 2 × 1½ inches over the right side of the skull, principally in the region known as the lower antero-parietal area, and which corresponds to the convolutions bordering the fissure of Rolando. Three years ago this patient had her first epileptic fit; since, the convulsions have recurred two or three times weekly. While she was being examined she had a fit. The convulsions, which were general, were of a tonic character for about half a minute; this was followed by three or four general clonic convulsions. Consciousness was lost. The contracture of the paralysed arm (left) was relaxed, and the eyes were strongly to the left during the fit. She has no aura preceding any of her fits. The least mental excitement is apt to bring on a paroxysm.

(3). A case of Necrosis of the Mastoid Portion of the Temporal.

This patient was a boy, seven years of age. About four years ago he had a purulent discharge from his right ear, which was followed by swelling behind the ear. A free incision was made into this swelling, and several small pieces of dead bone removed. The wound healed up quickly, and remained so until a few months ago. At present there is a copious purulent discharge from both the external auditory canal and the mastoid bone. The mastoid disease is supposed to have been caused by a plug of cotton wool which had remained in the ear for a period of fifteen months.

Dr. Worthington, of Clinton, showed a case of Paraplegia, being probably an example of the so-called Hysterical Paraplegia.

The patient is a married woman, 32 years of age. She has four children. During her first pregnancy, 11 years ago, she says she was unable to walk; and for a period of nine months following it, she maintains that she lost motion and sensation of the lower extremities. She recovered completely, and remained well up to her second pregnancy, when she complained of "lightning-like pains" in her lower extremities. She says that she again lost motion and sensation following the second pregnancy. After her third pregnancy she remained well. Two months after her fourth pregnancy (Nov., 1879), she "caught a cold," which was followed shortly afterwards by loss of power in the lower extremities; and from this state she has not yet recovered.

Present state.—There is considerable loss of power in both lower limbs. It is with the greatest difficulty that she can move about when supported by two persons; unassisted locomotion is not possible. Sensation is exalted in the paralyzed parts. The legs are œdematous. She has lost power over both rectal and vesical sphincters. The patellar reflex in both limbs is greatly exaggerated; ankle-clonus present. She complains of pains darting around the chest and abdomen. Vision good. There is no spinal tenderness, or unevenness of the spinous processes.

Dr. Sloan, of Blyth, showed a case of Anæmia in a man 23 years of age.

Eighteen months ago this patient had jaundice, lasting five days. Four months ago he commenced to lose flesh and color. There is no enlargement of the liver, spleen, or any of the lymphatic glands. Blood is normal; pulse, 38 when lying, sitting 48. There are no changes to be detected in either the thoracic or abdominal viscera. The temperature is not increased. The administration of iron has not been of any benefit.

Dr. Hyndman, of Exeter, showed a very well marked example of Aneurism of the left femoral artery, situated at the apex of Scarpa's triangle.

The patient is a man 23 years of age, with a good family and personal history. Three years ago he was accidentally shot; the ball (from a large pistol) passed into the left thigh, about the centre of its internal surface, taking a course apparently under the skin and fascia outwards to the external surface of the thigh, where it still lies imbedded Although there was no hemorrhage, the amount of shock was very great. The wound healed in a week, and it was then noticed that there was abnormal pulsation about the apex of Scarpa's triangle. Since this period he has been constantly attending to his duties as a clerk in a dry goods store. At present there is a large expansile pulsating tumor occupying the thigh, about the middle of its anterior and internal surfaces. It has a long diameter of four inches, and a short one (transverse) of two and a half inches. There is a distinct bruit to be heard and thrill to be felt over the tumor. Pressure on the femoral artery above arrests all pulsa-

tion, etc., in the swelling. There is no œdema and but little pain in the affected limb.

Drs. Stewart and Hurlburt, of Brucefield, showed a boy, aged three, who has lost in a great measure the co-ordinating power of the muscles of his lower extremities, and, in a slighter degree, those of the upper extremities also. He is unable to walk unless assisted. He walks much worse in the dark or with his eyes shut. There is no loss of motion or sensation. The patellar reflex is absent in both legs. The general health has not suffered any. The trouble came on gradually about two months ago. Vision is good. He has complete control over both bladder and rectum. He has had an offensive purulent discharge from the right ear for a year.

Dr. W. J. R. Holmes, of Brussels, showed a man aged 50, who has paralysis (almost complete) of both median and radial nerves in the hands. Full notes of this case will be given later.

Dr. Graham, of Brussels, showed a specimen under the microscope of the blood from a case of pernicious anæmia.

Selected Articles.

PHYSICAL DIAGNOSIS, AND THE EMPLOYMENT OF ASPIRATION IN CASES OF PERFORATING PERITONITIS.

BY AUSTIN FLINT, M.D.

Of the various causes of acute diffuse peritonitis, traumatic and puerperal cases being excluded, the most frequent is perforation of the alimentary canal. It is highly important to recognize this condition at the bedside, in individual cases for several reasons. One reason relates to the prognosis. The prognosis is extremely unfavourable if there be intestinal or gastric perforation. Another reason has reference to the use of opium in the treatment. In all cases of acute peritonitis, opium is the "sheet anchor" in the treatment; but there is added a special object in the use of opium if perforation exist. Recovery is possible only by such a degree of induced arrest of peristaltic movements as will allow adhesion to take place at the point of perforation. The practice of the future may furnish another reason. It may be that laparotomy will be found to be a life-saving operation in some cases. Opening the abdominal cavity, closing the perforation by proper surgical means, and washing out all irritating matters, it is not highly improbable will be a method of treatment sanctioned by its successful employment.

Correlatively it is of importance to be able to exclude perforation, at the bedside, in cases of acute peritonitis. One object of this paper is to invite attention to the proof against perforation afforded by a physical sign, namely, hepatic flatness on percussion. The exclusion of this cause is a ground for a favorable prognosis; it is to be considered in the use of opium in the treatment, and, at a future time, perhaps in deciding upon laparotomy.

Under normal conditions, flatness on percussion extends from about the sixth rib on the mammary line to the site of the lower border of the liver, that is to the level of the false ribs. In cases of perforation of the stomach or of the intestine, gas in greater or less quantity escapes into the peritoneal cavity. The exceptions, if there be any, must be extremely rare. Gas within the peritoneal cavity, the patient recumbent on the back, will separate the anterior surface of the liver from the thoracic wall. This is probably true without exception, provided there be not adhesion of the entire anterior surface of the liver as a result of peritonitis, and adhesion sufficient to prevent the entrance of gas between the liver and chest-wall is rare. The presence of gas between the anterior surface of the liver and chest-wall gives rise to tympanitic resonance on percussion. I assume that in cases of peritonitis with perforation, the normal hepatic flatness is always supplanted by tympanitic resonance. This statement is shown by experiments on the cadaver and by clinical observations.

The points which I make are these :—If perforation be the cause of the peritonitis, there is more or less gas in the peritoneal cavity; a stratum of gas will then separate the liver and the chest-wall, giving rise to tympanitic resonance on percussion, and, hence, if there be any persistence of the normal hepatic flatness, perforation as the cause of the peritonitis may be excluded.

It is only within a short time that my attention has been specially directed to this proof against intestinal or gastric perforation in cases of peritonitis. During this time, however, the following cases under my observation have exemplified its practical application.

In the case of a middle-aged man, seen with Prof. Erskine Mason, of New York, and Dr. Furnan, of Tarrytown, the history and symptoms pointed to perforation of the appendix vermiformis of the cæcum. The pain originated in the right iliac fossa; resistance to pressure was felt in this situation, and the abdomen was notably tympanitic. Moreover, the general symptoms denoted so much gravity that a fatal termination was considered highly probable. Hepatic flatness on percussion, however, was always found, and the recovery of the patient may be considered as rendering it almost, if not quite, certain that there was not intestinal perforation.

A woman of middle age, seen by me in consultation with Dr. Lewis and Dr. Hutchison, of Brooklyn, presented the symptoms of acute diffuse

peritonitis, with enormous tympanitic distention of the abdomen. Hepatic flatness was well marked, and on this fact perforation of the alimentary canal was excluded. Death took place within twelve hours after my visit. The autopsy showed the recent passage of gall-stones through an ulcerated passage in the duodenum. Two gall-stones were found in the small intestine. There was no gas in the peritoneal cavity.

In the case of a young woman, a patient of Dr. Burrall, of New York, acute diffuse peritonitis was developed in the course of typhoid fever. There was moderate tympanites in this case. Hepatic flatness was found on percussion. The case ended fatally, and there was no autopsy. That intestinal perforation had not taken place, was a fair inference, irrespective of the hepatic flatness, from the absence of the gravity of symptoms which perforation occasions, and from the fact that death did not take place for at least a week after the occurrence of the peritonitis.

So far as these cases go, they show that hepatic flatness on percussion is proof against perforation of the alimentary canal as the cause of an existing acute peritonitis.

A larger collection of cases is desirable, and a motive in submitting a paper at the present time is to interest others in testing the value of this physical proof.

Assuming that hepatic flatness on percussion is proof against perforation of the alimentary canal in cases of peritonitis, it cannot be assumed that tympanitic resonance over the hepatic region is always proof of perforation. The possibility of the colon being pressed upwards, so as to lie between the anterior surface of the liver and the chest-wall, has been demonstrated. But this occurrence is not necessary in order to explain hepatic tympanitic resonance on percussion. It happens not very infrequently that when the transverse colon is much distended with gas, tympanitic resonance is conducted upwards, so as to meet the pulmonary resonance. This conduction upwards of tympanitic resonance from the colon renders the evidence afforded by percussion of the site of the lower margin of the liver very unreliable. If reliance were placed upon percussion, it would be necessary sometimes to conclude that the liver is wanting in its normal situation. This conclusion was actually reached in a hospital case under my observation. The patient had cirrhosis of the liver, with some hydro-peritoneum, and a greatly enlarged spleen. It was reported to me as a case of transposed abdominal viscera, the liver being situated on the left side; and the tympanitic resonance in this case extended upwards to the upper margin of the liver, where it became merged into the pulmonary resonance.

It is not an uncommon error to infer diminution of the size of the liver by measuring, on the mammary line, the distance between pulmonary and tympanitic resonance. On the other hand, percussion is not to be relied upon for determining enlargement of the liver, for the reason that the upper boundary of the tympanitic resonance is no criterion for locating the lower margin of the organ. Here, however, we have a resource against the unreliability of percussion, namely, palpation. The sense of resistance to finger-pressure may be relied upon in ascertaining how far the liver extends below the false ribs, and the pulmonary resonance on percussion is reliable as indicating its upper boundary.

In order to show that the presence of air in the peritoneal cavity causes hepatic flatness to disappear, and gives rise to tympanitic resonance over the liver, the following experiment on the cadaver was made by Dr. Stone, House Physician of the Third Medical Division, Bellevue Hospital, at my request, and in my presence. It is proper to state that the experiment was suggested by Dr. Corwin, senior assistant of the division.

The body of a man, six hours after death, presented considerable tympanitic distention of the abdomen. Hepatic flatness was limited on the mammary line to a space about an inch in its vertical diameter. Air was injected into the peritoneal cavity through a small sized canula, which was attached to Bowditch's aspirating instrument. The trocar was introduced near the umbilicus. The hepatic flatness quickly dissappeared, giving place to tympanitic resonance.

The body of a woman, fourteen hours after death, presented complete collapse of the abdominal walls, and flatness on percussion below the sixth rib. There was considerable rigidity of the abdomen. Air was readily injected into the peritoneal cavity, causing distention and tympanitic resonance over the whole abdomen. The hepatic flatness at once gave plaee to tympanitic resonance.

In each of these experiments it was difficult to remove the air through the small canula by pressure over the abdomen, sufficiently to restore the hepatic flatness on percussion.

In order to obtain positive proof of the presence of gas within the peritoneal cavity, whenever, in cases of peritonitis, tympanitic resonance extends over the region of the liver, there can be no objection to an exploratory puncture with a small trocar and canula. The puncture should be made within the hepatic region, lest, possibly, if made elsewhere, the intestine might be wounded. The escape of gas through the canula is easily perceived by *the touch* and by the odor. Air injected, and allowed at once to escape, acquires an intestinal odor. If desirable, the gas could easily be collected by attaching to the canula an oiled-silk bag; or it might be aspirated and collected in a glass receiver.

The exploratory perforation thus supplies what

is lacking as regards proof of perforation afforded by percussion, and by means of percussion and the exploring trocar, in cases of peritonitis, it may be positively determined whether or not perforation exists. If hepatic flatness on percussion remain, there is no perforation of stomach or intestine. If, on the other hand, tympanitic resonance be found to extend over the region of the liver, all doubt as to the existence of a perforation is removed by an exploratory puncture in that region. It is hardly necessary to add that care should be taken, in introducing the trocar, not to penetrate the liver; not that the wound will do harm, but because the peritoneal gas will not then escape through the canula. The liver has not been penetrated if, after withdrawing the stylet, the end of the canula which has been introduced be freely movable.

A late writer in a standard work on practical medicine (*Ziemssen's Cyclopædia*), says of acute inflammation of the peritoneum, "the only difficult question is whether the peritonitis be with or without perforation. To decide this point we ought not to rely on any one single well-established physical sign, but make an accurate digest of the entire group of phenomena. Notwithstanding, the diagnosis in some cases must remain undecided." (Vol. viii., p. 208.)

By means of the simple methods submitted in this paper, as it seems to me, the question, whether the peritonitis be with or without perforation, is divested of all difficulty, and may always be decided positively.

It is assumed, in this paper, that the presence of gas within the peritoneal cavity in cases of peritonitis, always denotes perforation of either the stomach or intestine. The question may be asked, is not gas sometimes a result of chemical changes in morbid products within the peritoneal cavity, perforation not existing? Without denying the possibility of gas being thus derived, it is, as I believe, a warrantable statement, that the instances, if there be any, are so rare that they may practically be disregarded.

Recovery from perforating peritonitis, requires, first, agglutination by means of fibrous exudation, and, next, permanent adhesion by means of proliferating tissue, to some part with which the intestine or the stomach is in contact at the site of the perforation. It is obvious that the presence of gas within the peritoneal cavity must interfere with this requirement for recovery. Hence arises the inquiry whether the removal of this gas may not prove to be an important measure in the treatment.

Aspiration is probably the safest and best method for the removal of the gas. When air is injected into the peritoneal cavity through a small canula, its entire removal is not easily effected even by firm pressure over the abdomen. The entire removal is shown by the disappearace of tympanitic resonance over the liver, and this resonance was found to remain after firm pressure, in the experiments on the cadaver which I have related. Moreover, pressure on the abdomen sufficient to remove the gas in cases of peritonitis, would perhaps do more harm than the presence of the gas. Of the different aspirators, I should prefer either my adaptation of Davidson's syringe to thoracentesis, or Bowditch's instrument, for the reason that they are more readily under control, as regards the suction-force, than the aspirator of Dieulafoy. The puncture made by a small trocar causes so little pain that it might be repeated whenever the gas accumulated within the peritoneal cavity; or the canula, closed by a stop-cock, might be allowed to remain, and aspiration repeated as often as the resonance over the liver denoted the presence of gas. The aspiration might include the withdrawal not alone of gas but of the effused liquid. The removal of the latter is desirable, inasmuch as it may separate the site of the perforation from an adjacent part, and thus prevent closure of the perforation.

In order to demonstrate the possibility of the removal of gas from within the peritoneal cavity by aspiration, the following experiment on the cadaver was made, at my request, by Dr. Thatcher, junior assistant, Bellevue Hospital:—A trocar was introduced in the region of the iliac fossa and attached to Bowditch's aspirator. The injection into the peritoneal cavity of the air contained in the syringe twice, was sufficient to substitute tympanitic resonance for flatness in the hepatic region. Afterwards the trocar was introduced over the liver, and, by suction with the instrument, the tympanitic resonance was made to disappear and give place to the hepatic flatness which existed before the injection of air.— *Medical News.*

THE TREATMENT OF HIP-JOINT DISEASE.

Hip-joint disease is acknowledged by all authors to be, as a rule, a very unsatisfactory disease to treat. Many modes of treatment have been proposed, but the method that is described here seems to me to combine better the different objects of treatment than any other method that has been previously described.

In the first place, the condition of the lining membrane of the joint is one in which, in the first stage, there is an active inflammation present. Again, almost invariably, the child or adult affected with this disease is in a broken down state of health. The majority of children affected are more or less strumous, if this expression can be allowed. The pain on motion of the head of the femur in the acetabulum is sometimes exceedingly acute. The head of the femur moving about in

its socket, the acetabular cavity, causes an increase of the inflammation of the lining membrane, no matter whether the head of the bone or the acetabulum is primarily affected. The more quiet the limb is kept the less the pain and the less severe the inflammation. In order that the head of the bone and the acetabular cavity may not be in contact and keep up the pain and increase the inflammation, the first point in all proposed forms of treatment has been to apply extension, so as to remove this source of irritation by pulling the head of the bone out of the socket. The modes of accomplishing this object are very numerous. The most common treatment is that of the application of adhesive straps and weights. This has a number of disadvantages attending its use. In the first place, the child or person to whom the dressing is applied must remain constantly in bed. Not only must the patient remain in bed, but the decubitus must always be a dorsal one. As the treatment must be a prolonged one to be of any advantage to the patient, the confinement becomes almost unbearable. It is absolutely necessary to have the patient watched very carefully, this necessitates almost daily visits of the physician. The patient, if a child, has a tendency naturally to slide down in bed, and of course the extension is destroyed. The adhesive straps, in order to be of any service, must be firmly applied. The various bony prominences over which they fall are liable to become ulcerated, no matter how carefully they are watched. The patients suffering from this disease are almost invariably patients suffering from some dyscrasia. Fresh air and exercise are essential to a cure of any of these cases.

The apparatus of Dr. Sayre, of New York, in which the patient walks on a perineal strip, does away with some of the objections that the other treatment has. It, however, has its disadvantages. In the first place, the apparatus is very expensive, and as the majority of patients suffering from this disease come from the lower class, this comes to be a very important objection to the apparatus. The extension, when the apparatus is properly applied, is good and patients do improve rapidly at times under its use.

In an incipient case of hip-joint disease what are the essential points of treatment? The hip-joint must have absolute rest. The less the motion in the joint the better it is for the patient. Any apparatus that will accomplish this is a good apparatus in this stage. The head of the femur must be removed from contact with the acetabulum. In other words, the extension must be sufficient to prevent the friction of the head of the femur against the acetabulum. The patient must not be confined to bed, but allowed to take all the fresh air and exercise possible.

By the following treatment it seems to me that all the above objects may be obtained. There is no dressing that can carry out the first object of treatment, namely, the locking of the hip-joint, better than the application of the plaster-of-Paris breeches. The roller bandages thoroughly impregnated with plaster are to be applied as follows: One long external splint made of several layers of plaster is applied, extending from a level with the umbilicus down to the knee-joint. This splint must be very firm. Another splint, very heavy, must be applied along the inner surface of the thigh, extending from the fold above to the knee below. These two splints must be thoroughly adapted to the limb and held in place by circular turns of the plaster roller. After the plaster is hardened the hip joint will be found to be absolutely locked.

An important point to observe in the application of this dressing, is to have the external splint come up high enough, and to see that the circular bandage which turns around holds it firmly in position. The dressing should always be applied while the patient is standing on the well leg on a stool, allowing the diseased leg to hang, so as to get the advantage of extension.

To accomplish the second part of the treatment, the removal of the head of the femur from the acetabulum, let the patient wear on the well leg a raised shoe. The weight of the limb hanging is then amply sufficient to furnish a requisite amount of extension. With a pair of crutches the patient is able to go about and get all the advantages accruing from plenty of exercise and fresh air.

Only one opportunity has occurred in which the efficiency of the treatment could be tested. The case was of a girl eleven years old, who had been complaining of pain in the hip and knee for about six months. On examination the case was found to be undoubtedly a case of commencing hip-joint trouble. Plaster-of-Paris breeches and a high shoe were ordered and the child wore them for six months, going about on crutches. After an interval of six months the plaster was removed, the shoe was taken off, and the child put to bed for one week. After a week had elapsed she was allowed to get up and walk without anything. She could walk with absolutely no pain, and limped only slightly. This case happened about six months ago, and there has been no return of the trouble yet. From one case of course no opinion can be expressed as to the efficacy of any treatment. It seems to me, however, that this is without doubt the treatment for this trouble; and that if applied in time will do as much if not more than any other form of treatment. The advantages of the treatment are its cheapness, its ease of application, and its efficiency.

Plaster of Paris breeches have been used for some time in the treatment of this trouble. The high shoe on the well foot has also been used. The combination of the two is what is claimed

this paper as the best treatment of this much dreaded disease.—*Dr. Walker—Lancet and Clinic, Cin.*

SIMPLE METHOD FOR THE CURE OF OZÆNA.—Dr. Gottestein (*Gazz. Med. di Roma*) considers ozæna as a constant symptom of chronic coryza. There is no doubt that, after the interference with the functions of the glands, there is a diminution and alteration of the nasal secretion. Part of it, drying rapidly, adheres to the mucous membrane, on which it forms crusts, and it is the decomposition of these which is the cause of the odor. It is, therefore, only necessary that a limited portion of the mucous membrane should undergo atrophy to give origin to an ozæna. In adopting this theory of ozæna, it is evident that there can be no question of radical cure, since it cannot be hoped that the secretion of an atrophied mucous membrane can ever become normally reestablished. We must therefore be satisfied with the treatment of symptoms which is the most simple and convenient for the patient.

The author was led by chance to employ the following method, from which he has already, in fifteen cases of ozæna, seen the best results in less than three months.

Dr. Gottestein commences the treatment with a nasal douche, which, by freeing the cavity from its secretions, permits the recognition of the character of the mucous membrane and the extent of the existing lesion. This is followed by the introduction of a tampon of cotton, 3-5 centimetres long, which should remain in position for twenty-four hours.

About an hour and a half after the introduction of the cotton there is a little secretion from the nose. When the tampon is withdrawn the secretion is found to be fluid and without crust or odor. Twenty-four hours can be allowed to elapse between two applications of the tampon. When both sides of the nose are affected, the nose can be tamponed every twenty-four hours on the alternate sides. The tampons cause an artificial contraction of the cavities, and so increase the action of the column of air and facilitate the expulsion of the secretions, which are absorbed as rapidly as they are formed, and their desiccation is thereby prevented.—*L' Union Med.*, November 27, 1881—*Medical News.*

PROGNOSIS OF LARYNGEAL PHTHISIS.—In a paper on this subject, published in the *Archives of Laryngology*, Dr. William Porter, in answering the question :—Is laryngeal phthisis necessarily fatal ?, says that the recorded opinions of authority teach that laryngeal phthisis may only be retarded, that it is progressive and ultimately fatal. Heinze says "a cure of laryngeal phthisis will most probably never be made." And Lennox Browne voices the generally received opinion when he says "Not even the most sanguine throat specialist is yet justified, according to our experience, in giving even a moderately hopeful opinion as to result.

In his paper Dr. Porter does not subscribe to this doctrine of the inevitable fatality of laryngeal phthisis and relates briefly three typical cases which appear to support his view of their possible recovery. In each of these cases there was also disease of the lung tissue.

In the discussion which followed, Dr. A. H. Smith summed up his views in his concluding remarks, when he said that while it was barely possible that something might be done in the early stages, yet in going through the wards with his students, in speaking of those cases in which there was involvement also of the lungs, he almost envies the veterinary surgeon, who, after making careful pathological and diagnostic observations, sums up the treatment in the words :—"Axe to os frontis."

Dr. Johnson alluded to a point on which he was accustomed to rely whenever in cases in which there was no other trouble to account for the increased bodily heat, he finds chronic laryngitis associated with an irregular elevation of temperature, he gives a more serious prognosis than where the temperature is normal. He recalled one case of tubercular laryngitis, in which there was ulceration and loss of the posterior portion of one of the ventricular bands, and which he considered cured. The patient remained free from it until after the lapse of several years when pulmonary disease developed, of which he died.

Dr. Bosworth said that in the diagnosis the club-shaped arytenoids and appearances of infiltration were of value in deciding the presence of tubercular laryngeal phthisis, particularly in its early stage. He insisted that in such cases the introduction of brushes or sponges into the larnyx only increases the tendency to ulceration and hastens a fatal issue. If only medicated or detergent sprays be used the prognosis is better. Three years ago he had reported thirty-seven cases of laryngeal phthisis as arrested ; he had now increased his list to sixty cases ; among these there were quite a number in which there was laryngeal ulceration. But in cases in which there is well-marked elevation of temperature, lung symptoms are certain, after a while to develop and carry off the patient.—*Lancet and Clinic.*

PHTHISIS WITHOUT COUGH.—Dr. Wm. H. Thomson (Maryland Med. Journal) recently called attention to the occasional total abstinence of cough in phthisis. The phenomenon is by no means a rare one among the insane. Very often an extensive amount of pulmonary change may occur in the insane without the usual objective symptoms. In a few cases the absence of laryngeal lesion explains this.

THE CANADA LANCET.

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This Journal has the largest circulation of any Medical Journal in Canada.

CONSULTATIONS WITH HOMŒOPATHS.

Our ambitious contemporary, the organ of the Toronto School of Medicine, has recently exhibited marked symptoms of what might be called homœopathophobia. After alluding to what it considers the indiscretion of Dr. Bristowe, and the fallacious and short sighted arguments of Mr. Jonathan Hutchinson in reference to consultations with Homœopaths, it quotes with a great flourish of trumpets the half-hearted resolution recently passed by the Royal College of Physicians of London, to the effect "That while the college thinks it *not desirable to fetter* the action of its members, with reference to any opinions they may adopt, it nevertheless expresses its opinion, that the assumption or acceptance by members of the profession of designations implying the adoption of special modes of treatment, is opposed to those principles of the freedom and dignity of the profession which should govern the relations of its members to each other and to the public; the college therefore *expects* that all its fellows, members and licentiates, will uphold these principles by discountenancing those who trade upon such designations." The italics are ours. The organ, then, without due enquiry into the circumstances, accuses a "well-known medical man" in this city of meeting homœopathic practitioners in consultation, and applies the following epithets to him for his alleged breach of ethics. It speaks of him as "besmirching his immaculate garments;" "taking refuge behind Mr. Hutchinson's very fallacious and short-sighted argument that the knife and the catheter are the same in the hands of the rational and the homœopath," (poor Hutchinson!); that the "*pruritus secandi* does not constitute the surgeon;" that he was "prostituting himself," and was "*particeps criminis*, in foisting a fraud upon the public."

The facts of the case are as follows: A patient who was ill of what was at one time considered an obscure form of disease of the liver, was attended by a legally qualified homœopathic practitioner. An outside opinion was desired by the family, and the "well-known medical man," alluded to by our contemporary, was requested to see the patient and give an opinion. The request was complied with, and such an opinion given to the family, in the presence of the homœopathic practitioner, as the circumstances of the case at the time seemed to warrant. There was not a word said as to treatment, or the future management of the case. The matter began and ended there. To show that there was nothing so very peculiar in this procedure, it may also be mentioned that three "well-known" regular practitioners in this city saw the same patient for a similar purpose, one about a week previous to this time, and the other two—who by the way are members of the Faculty of the Medical School, of which our contemporary is the recognized organ—about a week afterwards! During all this time, and for some days after the visit of the last named gentlemen, the homœopathic practitioner was in regular daily attendance upon the patient. The only essential difference in the position of the consultants was, that the homœopathic practitioner was present when the gentleman alluded to gave his opinion to the family, which after all appears to our mind to have been the more honorable course, if an opinion was to be given at all under the circumstances. Our contemporary may think that in all this there is occasion for great alarm, but it may quiet its childish fears. The honor and dignity of the profession are safe enough in the hands of any of the medical gentlemen above alluded to.

With reference to the propriety of meeting legally qualified homœopathic practitioners in matters of diagnosis, prognosis, and surgical procedures, where no difference of opinion necessarily exists, and where no medicinal treatment is under consideration, we entertain very decided opinions in favour of such a course, but do not wish to press our views upon those who think differently. We sympathize

very strongly, nay, we are prepared to endorse every word uttered by the "indiscreet" Dr. Bristowe, and Mr. Jonathan Hutchinson, and especially the following, by Dr. Bristowe :—

"It has been held that to break down the barriers that at present separate us from homœopathists would be to allow the poison of quackery to leaven the mass of orthodox medicine. But who that has any trust in his profession, any scientific instinct, any faith in the ultimate triumph of truth, can entertain any such fear? All the best physicians of old times, all the greatest names in medicine of the present day, are with us; all science is on our side, and we know that as a body we are honest seekers after truth. What have we to fear from homœopathy? Bigots are made martyrs by persecution; false sects acquire form and momentum and importance mainly through the opposition they provoke. When persecution ceases, would-be martyrs sink into insignificance; in the absence of the stimulus of active opposition, sects tend to undergo disintegration and to disappear. The rise and spread of homœopathy have been largely due to the strong antagonism it has evoked from the schools of orthodox medicine, and to the isolation which has thus been imposed on its disciples. If false, as we believe it to be, its doom will be sealed when active antagonism and enforced isolation no longer raise it into fictitious importance."

Dr. May, in a recent address before the San Francisco Medical Society, after endorsing the above quotation, said, he was not sure that the representatives of the homœopathic faith in this city were behind the regular practitioners in intelligence, education and gentlemanly bearing; and however much his reason might rebel against their peculiar postulates, it cannot be denied that they possess the confidence of no inconsiderable portion of the community. To be for ever posing in a militant attitude towards them is not conducive towards the elevation of medical morals. The proposal to consult with them at the bedside has raised no little outcry in orthodox circles, but it is difficult to see where the valid objection lies.

The New York State Medical Society, one of the oldest and most respectable Medical Societies in the United States, at a meeting held in New York on the 7th ult., adopted a code of ethics which permits consultations with "all legally qualified medical practitioners." In the discussion which took place on the code of ethics, several prominent physicians said, that the persecution of the homœopathists implied in the refusal to accept them as physicians, had contributed in no small degree to the success of that school in the United States, and that in their opinion the adoption of this measure would eventually bring the two schools together, and extinguish homœopathy as a special school of practice. It was stated by some, that if the proposed code were adopted they would be ruled out by the American Medical Association, but the promoters said, the question was, whether it was right, and if so, let New York lead the van.

Professional courtesies between the homœopathic and regular practitioners in this city and other cities in Ontario, have been of frequent occurrence ever since the incorporation of the homœopathic with the regular profession in the Ontario Medical Council, and we see no good reason why it should not be the case, in so far as they have ground in common. To incorporate them with the general profession, meet together in the same Council, consult with them upon matters of most vital importance to the profession, and refuse to grant them the ordinary courtesies that even a poor unlicensed midwife would in all probability receive, is certainly most inconsistent. The insane cry against homœopaths and homœopathy has done more than anything else to bring them into prominence and public sympathy, and has contributed in no small degree to their success in this country. It is time that new lines were drawn, and those who can read the signs of the times can readily perceive that a change is coming over the spirit of bitter opposition. The remarks of Bristowe and Hutchinson, and the wording of the resolution of the Royal College of Physicians, show the changed state of feeling in England; not that the profession or individual members believe in the doctrines of homœopathy more to-day than in the past, but they are becoming more liberal towards those who differ from them. When such changes in high professional circles in conservative old England have taken place, where homœopathy has no legal status, need it be cause for wonder or surprise, if in Ontario, where they form an integral part of the corporate body politic of the profession, and are entitled to equal rights and privileges with the regular profession, there should be even a greater reversion of feeling in favor of showing them the ordinary courtesies of gentlemen towards each other, and of meeting them at the bedside in cases where only an expression of opinion in regard to diagnosis is

concerned, or an operation in surgery required, and where no compromise on the part of either consultant is demanded. We venture to assert that if such treatment were accorded them as here indicated, soon one and another would drop the distinctive title of homœopath, and finally all would merge in the general profession. Such a consummation has been more than hinted at already, by some of the leading homœopaths in England.

The resolution of the College of Physicians, it will be observed, is directed not so much against opinions as against "trading in treatment," and from certain letters which have recently appeared in the London *Lancet* from Drs. Dudgeon and Wyld, the homœopaths are quire pleased with the resolution of the college.

THE ONTARIO MEDICAL COUNCIL AND ITS (FRIENDS?).

In the interest of the Ontario Medical Council, especially at the present juncture, we cannot but express our deep regret that any Ontario medical journal should publish letters, no matter who may be their author, written with the transparent purpose of injuring any one of our well conducted Medical Schools. Such a communication appeared in the columns of our contemporary last month, and it is well known that the writer, who strives to hide behind the *nom de plume* "Medicus," is a high Council official. This writer gives, or pretends to give, the percentage of students from the various Medical Schools, who passed at the Council Examinations held last year. But the annual lists taken for several years past, conclusively prove that the per centage of pass men from the several schools varies from year to year. One year one school stands highest, and another year another—no two years showing anything like the same result as regards any particular school. For example, at the primary examination of the preceding year (1880), which was very stringent—especially in anatomy—only thirty-four candidates in all were successful; of these, nineteen were from Trinity Medical School.

The letter writer referred to, thinks he has made a great point against Trinity Medical School in his epistle, but his statistics are entirely misleading, and his conclusions utterly fallacious. It is not well to rake up the past, which for many reasons had better rest, but it would not be difficult to explain the "alleged statistics," and to show that a good many of the best men in Trinity School at that time did not pass, nor even go up for the Council Examinations at all, owing to special circumstances then existing. That the qualifications of these gentlemen were all that could be desired is proved conclusively from the stand taken by them at a recent examination in Great Britain, where they numbered 50 per cent. of the Canadian candidates, and every one of them passed with credit. The others were from various Canadian schools, and they also reflected credit on their schools and country. Does the writer of such a letter as the one alluded to, think it possible that the course he adopts can do the Council anything but the greatest conceivable injury? If a gentleman occupying the writer's high position, publicly assumes the *role* of a violent partizan, pitting one school against another, why should not members of the the Examining Board do the same thing, and if they should, what would be the speedy result? Unless the Council is to be killed outright by its pretended friends, let this sort of thing stop at once and forever. We should feel bound to take the position now assumed, no matter which of our schools had been attacked, for we consider there is a principle at stake in this matter, on which even the continued existence, not to say the future prosperity, of the Medical Council depends. The defenders of the Medical Council might well cry out "Save it from its friends."

SALE OF POISONOUS ALKALOIDS.

The recent poisoning case in England again brings up the question of permitting chemists and druggists to sell poisonous alkaloids to any but well known and legally qualified medical practitioners. We refer to the case of the unfortunate boy supposed to have been poisoned by his brother-in-law, Dr. Lamson, a *soi disant* member of the faculty of medicine of Paris, London, and other colleges, of all of which the assumption was apocryphal. Dr. Lamson was an American, who had married, in England, a Miss John, who, with two brothers, inherited considerable property. The elder brother died suddenly, under now con-

sidered suspicious circumstances, whil t under the treatment of this brother-in-law. The younger brother expired suddenly after a short illness, during which he had taken certain capsules and powders administered by this same Simon Pure. A detailed and careful analysis was made of the viscera of the patient and also of the pills and powders by Dr. Stevenson, of Guy's Hospital, assisted by Dr. Dupré of the local Government Board. In his evidence, Dr. Stevenson stated that from the contents of the stomach he extracted a small quantity of morphine and an alkaloidal substance which was not morphine, but had the characteristic effect upon the tongue of aconitine. On the mucous coating of the stomach was found a spot which had the appearance of a blister, or inflammatory effusion of lymph. Some of the alkaloidal extract was injected in the back of a mouse, which exhibited signs of poisoning, and died in 31 minutes with symptoms of poisoning by aconitine. Comparative experiments were then made upon two mice with Morson's aconitine. Having ascertained the result of these, he reverted to the alkaloidal extract obtained from the liver, spleen, kidneys, and stomach, and injected it into the back of a mouse, which showed signs of poisoning, and died in 22 minutes, after exhibiting symptoms precisely similar to those of mice poisoned by aconitine. He then compared the effect of this on the tongue with some of Morson's aconitine; they were precisely similar, and lasted upwards of six hours. The pills and powders were next examined in a similar way, and some of them were found to contain aconitine in poisonous quantities, combined with quinine. One of the powders was found to contain enough aconitine to destroy 10 persons. Aconitine is an alkaloid to which chemical tests cannot be applied. It can only be detected by physiological tests, such as putting it upon the tongue, and by experimenting upon mice or other small animals.

It is, however, a most gratifying circumstance, and a matter of great importance to the profession and the public, that many vegetable alkaloids of poisonous drugs, formerly beyond the ken of the anaylist, can now be detected by medical experts. But, whilst this is established, yet the fact remains that these dangerous active principles are not sufficiently guarded, or provided for by law against the sale by druggists, excepting to legally qualified medical practitioners known to the vendor. In this instance, on the accused merely declaring himself a medical practitioner Morson's Aconitine, prepared from the most deadly variety grown in India (Aconitum Ferox), ten times more deadly than the German aconitine, prepared from the Aconitum Napellus, was, without scruple, sold in a quantity, on evidence by Drs. Stevenson and Dupré, sufficient to get out of the way ten persons interfering with inheritance. This case, and others of a similar character, which have recently occurred, both at home and abroad, point out the crying necessity for still greater precautions being imposed on druggists in the sale of poisonous alkaloids, such as aconitine, veratria, picrotoxin, curare, eserine, hyoscyamine and other vegetable poisons.

PROTECTIVE POWER OF VACCINATION.—Dr. Henry Tomkins, medical superintendent of the Fever Hospital belonging to the Manchester Royal Infirmary, England, in a paper which he read recently at Owens College, said: "The most striking of all evidences is, perhaps, that derived from the small-pox hospitals themselves. At Highgate, during an experience of forty years, no nurse or servant, having been re-vaccinated, has ever contracted the disease, and evidence of the same character I can myself bring forward, for during the whole time that I had charge of the fever hospital more than one thousand cases of small-pox have passed under my care, yet no servant, nurse, porter, or other person engaged there, has, after re-vaccination, ever taken it, though exposed daily to infection in its concentrated form. One woman, a laundress, who escaped vaccination, took the disease and died; one nurse, who some years before had suffered from small-pox, and was then considered protected, had a very mild attack; and this summer a workman, who did not live on the premises, but came in to work as a painter, was not vaccinated, and had rather a severe attack, and still more recently a servant, who by an oversight was allowed to go about her work three days before being vaccinated, had, before the latter had run its course, a slight abortive attack. Again among all the students who during the past two years have attended the hospital for clinical instruction, not one has suffered, all having been re

vaccinated before being permitted to enter the small-pox wards. I defy the most enthusiastic or conscientious of anti-vaccinators to produce evidence like this on his side of the question, or to bring forward even half a dozen persons, choose them whence he may, who have not been protected against small-pox, and expose them as the students are exposed, without more or less of the number taking the disease." Facts such as these should convert the most ardent anti-vaccinator from his folly, and convince him that a weapon of defence so powerful as vaccination should not be left to the pleasure of the individual, but that the State has the right and duty to look after its most thorough performance.

Iodine in the Treatment of Malaria.—Dr. Morrison, in an article in the *Maryland Med. Journal*, on the above subject, states that the tincture of iodine, in doses of fifteen minims three times a day, equals, if it does not surpass, cinchonidia in its action in acute malaria. It was tried in 250 cases at the Baltimore Dispensary during the year 1881, and was found more successful in effecting a cure than the usual malarial mixture of cinchonidia and arsenic. The *rationale* of its action is, that iodine destroys the organisms in the blood which cause the symptoms of malaria, or in other words, destroys the malarial poison.

Tonga in the Law Courts.—Under the heading of "Trademark Litigation," we noticed in the Lancet for November, 1881, a suit then pending in the U. S. law courts in reference to the use of the word "tonga," as a name for a certain drug. This was an action brought by the Messrs. Allen & Hanbury, of London, England, to restrain Messrs. Parke, Davis & Co. from the use of the word "tonga," which the former claimed was the trade mark name of the drug, and registered by them in England and the United States. Messrs. Parke, Davis & Co. were determined to defend the suit and appeal the case if necessary to the higher courts, but this has been rendered unnecessary by the complainants withdrawing the suit and assuming the costs. Tonga is a combination of barks collected by the natives of the Fiji Islands, who have employed it for many years as a remedy in neuralgia. Its efficacy was tested by Drs. Murrell and Sidney Ringer, of London, and many others, and it has been found of great value in the treatment of neuralgic affections, especially in those of the cranial nerves.

Chronic Ulcers.—The following is the treatment followed in the Notre Dame Hospital, Montreal, (*L'Union Medical*). In cases of ulcers of long standing, the nutrition of the skin in the neighbourhood of the ulcer, is generally at fault, the blood there stagnates more or less, and causes in a great degree, the difficulty in effecting a cure. Many modes of treatment have been tried according to the requirements of each case. Compression applied with the limb elevated, has given the best results in ulcers of this kind. The compression is applied by means of a roller, the wound having been previously dressed with carbolic acid or oxide of zinc ointment, and covered over with a thick layer of wadding, over which is placed another covering of pasteboard, for the purpose of equalizing the pressure. When the discharge is too exuberant, or when there is much redness or flabbiness, the edges may be cauterized with nitrate of silver, and powdered alum applied to the surface of the wound. The red lotion generally constitutes an excellent application, when the ulcer secretes a great quantity of pus. It will also be found beneficial to replace the ordinary wadding by absorbent cotton, which absorbs the excess of pus, and prevents it flowing over the edges of the ulcer. In certain cases of large ulcers marked success has attended the use of the rubber bandage, applied once a day, the limb having been previously covered with a thick layer of wadding.

"Still Harping on their Successes."—Every mail brings us newspapers containing notices of little surgical operations and procedures, successfully performed by medical men in different parts of the country. Some of these notices, from their technical phraseology, are evidently written by a professional hand, others are no doubt written by the reporters, as for example the following:—A lad 16 years of age, in handling a loaded pistol, met with an accident which "tore away the fleshy part of his right hand. Dr. —— has the young man under treatment. A couple of stiff fingers will probably be the consequence." One thing however, is to be particularly observed in connection with these paragraphs which are "always written by the editor or reporter of the paper," viz.: that there is never a word about "unsuccessful

cases," although every medical man must necessarily have a few such cases, in which the public no doubt feel an interest. It is really very kind of the editors and reporters to suppress the names of the Drs. in attendance in all such cases. We are much pained to find the name of one of the Vice-Presidents of the Ontario Medical Association (Dr. Hamilton) figuring in a questionable manner in a recent number of the *Port Hope Times*.

Sir Robert Christison.—The death of Sir Robert Christison, M.D., F.R.S., of Edinburgh, at the age of 85 years, is announced in our exchanges. He was appointed to the chair of Medical Jurisprudence in the University of Edinburgh in 1822, and ten years afterwards he was promoted to the chair of Materia Medica, which he filled for 45½ years, until his resignation in 1877. He published a "Treatise on Poisons," one on "Materia Medica," etc., besides contributing numerous valuable papers to the medical journals.

Grindelia Robusta in Asthma.—In the February number of the proceedings of the King's Co. Medical Society, will be found an interesting report by the committee on therapeutics, with reference to the value of grindelia robusta in asthma. Three members of the committee report favourably of its use, and three adversely. The article used was Squibb's fluid extract, and it was given in half drachm doses four times a day, alone or mixed with equal parts of glycerine. All are agreed that certain cases of asthma are undoubtedly relieved by its use, but it does not fully bear out the high claims made for it, in all cases.

Canadians Abroad.—H. E. Heyd, M. D., (McGill), of Brantford, has successfully passed the examination of the Royal College of Surgeons, Eng., and was admitted a member on the 19th of January last. Drs. W. H. Aikins, W. A. Allen, and W. C. Edmondson, were admitted Licentiates of the Royal College of Physicians of London, on the 27th of December last. Dr. Hamilton Meikle, of Oakville, has passed his final examination in the College of Physicians and Surgeons, Edinburgh, and received the double qualification.

A New Blood Corpuscle.—Prof. Bizzozero. of Turin, has recently announced the discovery of a new and important corpuscular element in the blood of mammalia. It is somewhat similar to, but not identical with, the third corpuscle of Norris. These elements are pale, oval or round bodies, about one-half the size of the red corpuscles among which they are scattered. They are best seen in the course of the circulation, but may also be observed in freshly drawn blood. They possess no stroma, contain no hæmoglobin, and rapidly degenerate into granules. These new elements are believed to play an important part in the production of thrombi.

Substitute for Carbolic Spray.—The ermedy which promises to become a substitute for carbolic acid spray is borax. It has no odor, and may be administered or applied in large doses without producing any unpleasant symptoms. From carefully conducted experiments by Dumas and Schnatzles, .75 per cent. of boracic acid will prevent the growth of bacteria in animal fluids. Borax has been used as a surgical dressing with marked success, and is deserving of a more extended use.

Elastic Gum Trusses.—John Bint, of this city, has shown us a sample of what he calls an "Elastic Gum Truss." The pad is soft and elastic, made from a composition similar to that used in the manufacture of bougies and catheters. From its appearance we think it will be found an improvement upon the hard rubber truss, inasmuch as it is soft and resilient, and therefore less likely to chafe the wearer.

Examination for Licence.—By reference to our advertising columns it will be seen that the professional examination of the College of Physicians and Surgeons of Ontario will be held on the fourth of April. Candidates are requested to send in their applications at least two weeks before the commencement of the examination.

Books and Pamphlets.

Epilepsy and other Convulsive Diseases.—By W. R. Gowers, M.D., F.R.C.P. London: J. & Churchill. Toronto: Willing & Williamson.

We can confidently recommend to our readers this work of an accomplished scholar, as one of the best on the subject extant, both in the consfderation and treatment of those forms of the disease which are the result of organic changes that can be recognized after death, as also of others expressive of a condition of the brain not evidenced after

death by any visible alteration. From the 1450 cases given, Dr. Gowers has attempted the difficult task of separating the severe cases of hysteroid convulsions from those of simple epilepsy; the various predisposing and exciting causes are carefully considered and commented on, the general character of the attacks, and symptoms in detail, the forms of warning, and the proportion of cases in which consciousness is lost so early that the commencement of the fit is unfelt. He states that loss of consciousness precedes or accompanies the first symptoms in half the cases, in the other half the patient is aware of the commencement of the attack. These proportions agree closely with those ascertained by Romberg and Sieveking. The various forms of warning, whether unilateral, bilateral and general, visceral, cephalic, psychical, or of the special senses, are minutely described. The sixth and seventh chapters are devoted entirely to hysteroid or co-ordinated convulsions. The important distinction between these and true epileptic convulsions, as pointed out by Charcot and Richer, are, 1st. The attack is often preceded by a peculiar mental state, with hallucinatious. 2nd. The tonic spasm with which the epileptoid stage commences, is usually immediately preceded by violent movements of the limbs. 3rd. An attack may be brought on by compressing the ovaries or touching hysterogenic points on the surface. Dr. Gowers does not, however, consider that Charcot's views of exciting and arresting hysteroid convulsions by compression of the ovaries is to be relied upon. His experience of ovarian compression—so efficient at the Salpétrière in inducing and cutting short attacks of hystero-epilepsy—is, that in England it has failed to produce a marked effect on the patients suffering from this affection. We quote a few of the diagnostic characters of epileptic and hysterical fits. Onset in epilepsy sudden, hysteroid often gradual; scream in epilepsy at onset, in hysteroid during course; convulsions in epilepsy, rigidity followed by jerking, in hysteroid rigidity or struggling, throwing limbs about; micturition in epilepsy frequent, in hysteroid never; defæcation in epilepsy occasional, in hysteroid never; talking in epilepsy never, in hysteroid frequent; duration in epilepsy a few minutes, in hysteroid half-an-hour or several hours. In the treatment of the disease, Dr. Gowers finds often great benefit by combining the bromides with digitalis, belladonna, tincture of iron and borax, according to existing condition. Our readers will find this work an admirable compendium of the diagnosis, prognosis and treatment of this formidable disease.

THE SCIENCE AND ART OF MIDWIFERY.—By William Thompson Lusk, A.M., M.D., Professor of Obstetrics and Diseases of Women and Children in the Bellevue Hospital Medical College, etc. 8vo.,, pp. 687, with numerons illustrations. Cloth, $5. New York: D. Appleton & Co., Toronto: Willing & Williamson.

It appears there is to be no lack of American authors in this branch of medicine. A short time since we reviewed in these pages a treatise on midwifery by Dr. Glisan; and it was announced some time ago that Prof. Parvin, of Indianapolis, had a work in preparation. The work before us is fully abreast of the times, every recent advance in the science and art of midwifery being faithfully recorded. The work is a most creditable one, and will reflect honor on the American profession. The author has given special attention to the results of the labors of the French and German obstetrical writers. His style is attractive, the matter well selected, and the text fully and carefully illustrated. The work is deserving of the highest commendation.

A SYSTEM OF SURGERY, THEORETICAL AND PRACTICAL. In Treatises by various authors. Edited by T. Holmes, M.A., Cantab, Surgeon and Lecturer on Surgery at St. George's Hospital, London. First American, from Second English Edition. By J. H. Packard, M. A., M. D., Philadelphia, in three volumes. Vol. II. Philadelphia: H. C. Lea's, Son & Co. Toronto: Hart & Co.

The first volume of this excellent work on surgery, which we noticed a short time ago in these pages, embraces general pathology, morbid processes, injuries in general, complications of injuries, and injuries of regions. Volume II. embraces diseases of the organs of special sense, circulatory system, digestive tract, and genito-urinary organs. It is unnecessary to add anything to our former notice of this admirable treatise, except to congratulate the profession upon the issue of the present edition. The new binding in Russia adopted by this firm, is not only very substantial, but highly to be commended for its artistic beauty.

THE NURSE AND MOTHER. A Manual for the guidance of Monthly Nurses and Mothers. By Walter Coles, M.D., St. Louis. St. Louis: J. H. Chambers & Co.

TREATMENT OF HYDROCELE AND SEROUS CYSTS IN GENERAL BY THE INJECTION OF CARBOLIC ACID.—Dr. Levis states that he has been experimenting with a view of determining what substance may best secure the obliteration of the secreting surface, and the adhesion of the walls of the cyst with the most certainity and the greatest freedom from suffering and danger. Having selected carbolic acid as an agent which would provoke simply a plastic inflammation, he injected one drachm of of the deliquesced crystals into the sac of a large hydrocele. The new procedure was entirely painless. A sense of numbness alone was experienced, and no inconvenience was felt until, on the next day, the desired inflammatory process developed. A nine years' hospital and private experience leads the author to believe that this method is the most satisfactory for the object. For the purpose of injection, crystallized carbolic acid is maintained in a liquefied state by a five or ten per cent. solution of either water or glycerine; the crystals are to be reduced to the fluid state with no more dilution than may be necessary for this. After tapping, inject with a syringe having a nozzle sufficiently slender and long enough to reach entirely through the canula. He has never been able to detect any general toxic effects upon the system, but believes that the action of strong carbolic acid on surfaces secreting albuminous fluids is to seal them, to shut them off from the system in such a way that absorption cannot readily take place. The occluding influence of strong carbolic acid he regards as an important surgical resource in certain cases of compound fracture, destructively lacerated wounds, and ulcerating surfaces, where septic infection is inevitable. All forms of serous cysts which are usually subjected to any form of operative treatment, on the principle of producing plastic adhesion of their walls, may be deemed amenable to the treatment indicated.—*Medical News.*

CHLORAL HYDRATE IN DIABETES.—Prof. Eckhard shares the opinion of Mering and Musculus that the urine of animals under the influence of chloral never contains sugar. The author has arrived at this conclusion from the following experiments: After injecting a certain quantity of chloral hydrate under the skin of a dog, the fourth ventricle of the brain was punctured; no sugar, however, appeared in the urine. In a second animal glycosuria was first produced by puncture of the floor of the fourth ventricle; chloral was then injected and sugar disappeared. Glycosuria may be produced reflexly by section of the vagus in the neck and stimulation of the proximal extremity; but the experiment fails in chloralised animals. Similarly no sugar appeared in the urine of a dog made to breathe carbon monoxide, when chloral (five grammes) had previously been administered. This evident influence of chloral over the excretion of sugar by the kidneys has been turned to account in the treatment of diabetes; in two patients who were subjected to this method of treatment a marked decrease was observed both in the quantity of urine and in the amount of sugar which it contained.—(*Arch. f. Exp. Pathol.*)—*Glasgow M. J.*, Nov.

THE LAW OF SLANDER AS APPLICABLE TO PHYSICIANS.—A paper on this interesting subject appears in the August number of the *American Law Register*, of Philadelphia. It is from the pen of Mr. Whittaker, attorney at law, of Cincinnati, and it teaches its lesson from a very good text. He says: "There is, no class of professional men more subject to abuse, and it is believed, more powerless to obtain redress, than physicians. About clergymen the law has thrown its protecting arm, and public opinion has been wont to overlook, if not pardon their shortcomings. The clergyman is a sort of privileged person, whose character is tried before and whose conduct is regulated by ecclesiastical tribunals to which the courts of law have relegated it. Lawyers can take care of themselves."—*Lancet and Clinic.*

Dr. Bristowe, in his address before the British Medical Association, touching homœopathy, said that, if we wish to live broad and unselfish lives, we must be slow to condemn all those who entertain convictions which to us seem foolish or mischievous and logically untenable, or to refuse to co-operate with them.

Births, Marriages and Deaths.

At Manilla, Ont., on the 3rd of January, Wm. Philip, M.D., aged 30 years.

At New Hamburg, Ont., on the 5th ult., Dr. William H. Boullee, aged 60 years.

In Toronto, on the 1st of February, Dr. J. P. Lynn, aged 42 years.

At Dorchester, N. B., on the 11th ult., William Wilson, M.D., aged 77 years.

At Chester, on the 31st of January, C. W. Hiltz, M. D., aged 41 years.

At Frankville, Ont., on the 29th of October, 1881, A. R. Lander, M. D., aged 62 years.

At Merrickville, Ont., on the 22nd ult., Wm. Weir, M. D., aged 48 years.

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OF THE USE OF THE OPHTHALMOSCOPE IN DISEASES OF THE EAR.

(Translated from the Progrès Médical of 21st Jan.)

BY C. W. COVERNTON, M.D., M.R.C.S., TORONTO.

The organ of hearing is only accessible in its peripheral portion to direct exploration. Whilst the ophthalmoscope permits us to study the fundus of the eye, the internal ear enveloped in its bony case, remains concealed from the aurist who can only diagnose lesions by indirect means or by elimination. Nothing permits us to hope that these unfavourable conditions of a purely anatomical nature, can ever change, and if we wish to arrive at a knowledge of the exact nature of the diseases of the internal ear, we must have recourse to indirect means. For some time past the ophthalmologists and aurists, Knapp, Moos, Kipp, Allbut, have endeavoured to recognize the condition of the auditory nerve, from that of the optic, but up to the present the result of ophthalmoscopic examination has established no fixity of data in observations of diseases of the ear. We may then profit by the important communication made on this subject by Professor Zaufal to the Medical Society of Prague, by calling the attention of the readers of the "Progrès Médical" to this subject. In the cases of nervous deafness, so frequent a form in young women and in which noises predominate, with a loss of osseous perception and a negative state of the apparatus of transmission, it is very important to know to what immediate cause is due the functional trouble, and the state of the retina will indicate that of the lamina spiralis of the axis or modiolus of the cochlea, especially from the point of view of the circulation. The same applies for sudden deafness of syphilitic origin, when a rapid exudation takes place in the internal ear, and for cerebral traumatisms followed by deafness, etc. When the troubles observed have not their cause in the middle or external ear, it is often very difficult to determine whether the lesion has its seat in the internal ear, the nerve or the auditory centres. Now an ophthalmoscopic examination will permit us to determine certain encephalic lesions, and we can often determine whether the cause of the trouble is central, perepheral or mixed. In the affections of the tympanum, it is still necessary to practice ophthalmoscopic examinations at whatever stage they may be seen, for even in the absence of all symptoms, there may already have taken place a propagation to the nervous centres This obtains in suppurative, acute or chronic otitis, and even for catarrh, simple, acute or chronic, which may, as we have instances, produce intra-cranial complications. In revealing to us meningitis and thrombosis from their commencement, the ophthalmoscope permits us again to determine the indications for trephining. The lesions of the fundus of the eye augment or diminish with those of the meninges, the progress of meningeal lesions will be revealed by that of lesions of the retina (Allbut, Kipp, Zaufal,) and again it is by the state of the retina that we are enabled to judge of the amelioration of encephalic lesions due to trephining. When inflammation of the tympanum is continued to the meninges, the ophthalmascopic lesions appear at first in the corresponding eye, but they nevertheless affect both eyes, and sometimes are more marked in the eye opposite. The same after trephining, it is on the corresponding eye the amelioration commences to be produced, but it manifests itself also on the other eye. A curious circumstance is that in all the cases studied by Zaufal, where a mild suppurative otitis with or without caries had produced meningitis and thrombosis, constantly were found very marked alterations of the fundus of the eye (stasis, neuro-retinitis, strangulation, etc.) contrary to that which occurs in other forms of meningitis, principally in cerebro-spinal meningitis. To more fully understand all the importance of this new element of diagnosis, we cite a case reported by Zaufal: "A young man 16 years of age, very vigorous, was attacked with mild suppurative otitis of the left ear with perforation of the membrana tympani and cervical adenitis. No method of treatment had proved of any avail, and for some time his general condition was bad. There was night fever and anorexia; on going down stairs the patient had experienced vertigo, and irrigation of the ear commenced to produce giddiness. Nothing to be

observed at mastoid process, but percussion produced vertigo. Ophthalmoscopic examination showed the fundus of the eye to be of a dark red, the redness augmenting towards the papilla of which it covers a large part on the internal side. Arteries normal, veins very dilated and sinuous ; papillæ badly defined, of a dark red within ; on the right papilla near to the point of exit of the central vessels, hemorrhage covering all the central part. Diagnosis : venous hyperæmia, extension to the meninges. Trephining was performed. The next morning no more vertigo on percussion or on irrigation. Patient feels well, no fever, appetite returned. The fourth day the internal part of the papilla is still very red, nevertheless the veins are notably narrower and the fundus of the eye much paler. The hæmorrhagic extravasation is smaller and the borders indistinct. On the 8th day sudden elevation of temperature to 41° cent. (=Fah. 105-4.) Ophthalmoscopic examination indicating no modification, all idea of new intra cranial lesion was ruled out; accidental complication was the view entertained. It was in fact a septic fever which subsided, and the cure was complete." This brief résumé permits us to form an idea of the importance that the ophthalmoscope will acquire in the study of diseases of the ear. Let us hope that thanks to it, the affections of the internal ear will be completely differentiated, the one from the other, studied and treated in a manner really scientific.

LESIONS OF THE CENTRAL NERVOUS SYSTEM, OF PERIPHERAL ORIGIN. BY CH. TALAMON, REVIEW BY DR. A. LEONE.

(*Translated from "Il Pisani Gazzetta Sicula, Palermo.*)

BY JOSEPH WORKMAN, M.D., TORONTO.

(Continued from page 198.)

CHAPTER III.

Of some symptoms or phenomena observed, following irritation of the nerves on the periphery.

We shall bring together in this chapter a large number of scattered facts, in which a centripetal irritation, acting on the nervous centres, is carried across either with phenomena of excitation, or of paralysis, without our being able in the present state of our knowledge, to specify the lesion produced by this irritation, in consequence of having from anatomical examination only negative results. We shall, in the meantime, admit that these alterations exist, because we cannot comprehend a functional modification without an organic one—a modification of very low relief in certain cases, more profound in others, the nature of which evades us for the moment, just as the nature of the anatomical substratum of infantile paralysis, of muscular autopsy, and of locomotor ataxia, escaped our predecessors. "Whenever no microscopic alteration is found," says Vulpian, "it is permitted to us to reserve a doubt, for the histology of the nervous system is yet but young, and certain modifications of the anatomical elements of the nervous centre may easily evade our means of investigation." It is, therefore, very probable that a modification of the cerebro-spinal axis may exist in the facts we are about to state. This irritation, we have said, is carried over by two orders of phenomena : *convulsive and paralytic.* Before entering into the clinical study of these facts, it is well to enquire as to what experimental physiology may be able to teach us in relation to the subject.

In this order of ideas and facts, the most notable have been brought under view by Brown-Sequard in his experiments on the epilepsy of *cobayes.* After finding that these animals became epileptic after section of the cords of the medulla, and above all, of its posterior cords, this physiologist demonstrated that the same result could be obtained by irritation of certain peripheral nerves; thus the stretching, crushing, or section of the sciatic, or the popliteus internus, as also the irritation of the visceral nerves, acted. Brown-Sequard, in fact, succeeded in rendering epileptic some *cobayes* on which he had cut the grand sympathetic in the abdomen. Facts of the same sort have been observed by Vulpian, and by Hayem on rabbits, cats, dogs, and other animals of the mammifera. Brown-Sequard brings in the vaso-motor nerves to explain the production of this artificial epilepsy. Prof. Vulpian, however, has combated this theory in his lectures on the vaso-motor apparatus. "Why," asks this author, "desire absolutely that the construction of the cerebral vessels should play so important a part in the production of this epilepsy, when the anatomical elements of the encephalon can be modified directly by the

irritation coming from the periphery?" And truly we would say the same; because, if the peripheral irritation be capable of modifying the vaso-motor centres, that is not for us a valid reason for the denial of its capability also to modify, and much more actively, the nervous cells with which the cord conductive of the irritation is in direct continuity. This hypothesis is the more rational; it is that which has been proposed by Handfield Jones, in England, Jaccoud, in France, and Wier Mitchell, in America, and it has been adopted by Charcot in his lectures on urinary paraplegia. In the experiments of Brown-Sequard in the artificial epilepsy of cobayes, the phenomena of excitation occupy the first position, but in the same experiments it was likewise observed that intense irritation of the centripetal nervous fibres sometimes determines a weakening of the nervous action in the part of the medulla corresponding to the insertion of the nerves irritated. This fact also has been confirmed for us: 1st, by the observations of Herzen, Lewisson, and Combaire, who availed of mechanical stimuli on various species of animals; 2nd, by Vulpian, who effected his studies by means of faradization on rabbits: 3rd, by the celebrated observation of G. Echeverria on man.

Hitherto we have what has been taught by experimental pathology. In all these experimental facts it is necessary to note with Vulpian, that, with the exception of the artificial epilepsy of *cobayes*, the phenomena produced by centripetal irritation are always of short duration; a fact not observed in man, in whom, as we shall see, they are, on the contrary, more or less persistent. In the clinical facts we are about to state, we shall first speak of the phenomena of *excitability*, and afterwards of those of *inexcitability*, or *depression*.

A. *Phenomena of excitability.*—Among the various clinical manifestations derived from the irritation of the nerves of the periphery, we shall select those which seem to be derived more directly from the modification carried to the central system. And here again we shall take as our basis of the description, the nervous phenomena observed on persons who had undergone amputations. These nervous phenomena are of two orders; the one local, the other distant. The first have been described and well studied by Mitchell, under the name of the neuralgia and chorea of stumps. The most notable example of this sort of neuralgia is that reported by Dr. Nott: a man whose leg had been amputated was taken with atrocious pains in the limb operated on, a short time after the operation; amputation was performed a little higher, and afterwards an inch of the sciatic nerve was excised (?) in the popliteal hollow—no relief. It was necessary to amputate the thigh; this time without good result. Dr. Nott then cut off an inch of the sciatic below the pyramidal muscle. This piece of the sciatic was the first that appeared to the naked eye sound; but microscopic examination was not made. This last operation gave a partial amelioration. Analogous phenomena are also observed following traumatisms the most various. In the treatise of Swan numerous examples of these neuralgias are found; facial neuralgia from dental caries is a type of it. Mitchell relates many examples of this sort, and in all the cases he attributed the persistence of the neuralgia to an ascending neuritis. Vulpian, on the contrary, thinks these neuralgias frequently have another mechanism, and that they depend on a modification of the grey substance of the medullary centre. This hypothesis of Vulpian has the merit of explaining other facts, of which it is difficult to render a reason, as, when the neuralgia is reflected upon the nerves of the sound side; thus in one of the observations published by Hutchinson, after a wound of the cubital nerves and the median of one side, the pain was localized in the hand of the opposite side. Pirogoff, as cited by Mitchell, relates an analogous fact of a wound of the right brachial plexus. Ollivier has communicated to the society of biology an interesting observation of this sort of reflex neuralgia. A woman received a blow which bruised the fifth intercostal space. After a few months she felt in this region occasional sharp pains, and some months afterwards shooting pains, with formication and prickings on the right side of the neck, in the clavicular region, and along the arm and forearm down to the ring finger and the inner half of the middle finger. These pains disappeared in a few days under the influence of subcutaneous injections of morphia. Now this fact cannot be explained unless by admitting with Ollivier, that the contusion of the fifth intercostal nerve had determined in the cells of origin of this nerve, a morbid excitation, which was propagated to the proximate cells, and carried, by means of the sensorium, to the periphery of the nerves proceeding from it.

Besides neuralgias as local manifestations of irritation of peripheral nerves, Mitchell speaks of the chorea of persons who had undergone amputations, as another phenomenon of excitation. "The muscles of stumps," he says, "especially in cases of arm amputations, are always in such a state that the emotions and the changes of weather, determine in them spasmodic contractions," and he sustains this opinion by two examples; the first of which was an amputation of the left arm; after a certain time spasmodic contractions in the stump occurred every time the individual attempted to move it; at the same time slight stretchings in the muscles of the face on the left side were observed. In the second example, amputation of the forearm at its lowest third, three months after the operation spasmodic movements of the stump, not only in the forearm, but in the muscles of the arm were seen; the forearm was the prey to a continual agitation, both night and day, without any truce. These movements began to reach the shoulder, the muscles of the trunk, and of the neck (on the right side). In this case Mitchell is in accord with Vulpian, in regarding these movements as due to some nervous lesion, originally limited to the stump, which had afterwards determined a central irritation that was manifested in reflex spasms. Vulpian adds that the morbid modification is located in the grey substance; he says, "this modification is different from that of neuralgia, only by its nature or its seat, but in certain cases it may co-exist with it," and this opinion has been confirmed by Mitchell, who says that "it is not rare to find individuals in whom the spasmodic movements are accompanied by violent neuralgic paroxysms." Langstaff gives an example of this. The tendency of these nervous phenomena to radiate into neighbouring parts, has been demonstrated in two examples by Mitchell, in which the motor excitation extended from the nerves of the arm to the facial nerve in one case, and to the nerves of the neck and trunk in the other, that is, from the cells of origin of the facial, to those of the nerves of the neck and the trunk.

We have said that the nervous phenomena developed after irritation of the nerves at the periphery, are, some local, and others distant from the lesed point. We saw then what those phenomena were, which take place also in parts distant, or better to say, which are extended into the whole nervous system. We have not spoken, nor shall we speak, of tetanus, nor of hysteria, neuroses which form in themselves a very complex question. We shall limit ourselves to speaking of cases of epilepsy observed in man, following amputations or traumatism, analogously to our remarks on the epilepsy of *cobayes*. Mitchell saw, in a person whose hand had been amputated, muscular spasms produced in the extremity of the part cut, which ended in true epileptic accesses. The median and cubital nerves were trebled in volume and as hard as tendons.

Examples of cases following traumatism have been very numerous: in 41 observations of peripheral epilepsy, collected by Brown-Sequard in 1869, many appertained to traumatism, and more especially to lesion of the sciatic nerve, or of its branches, and to lesions of the elbow and the hand. The most corroborative observations in this relation are those published by Billroth in 1872, by Schaffer in 1873, and above all those by Magnan, of which we shall now give a very fine example. In February, 1862, a man who never had epilepsy, received a kick of a horse on the posterior part of his *left* heel. The contused wound produced by this injury cicatrized in a few days. In the course of the month of March he several times experienced a sensation of cold, which went from the wounded heel, with cramps, to the malleolus. On the 11th of April the sensation of cold, which he compared to a drop of cold water running between the skin and the flesh, went from the heel to the malleolus, and was followed by strong cramp and convulsive shakes; these shakes reached the thigh, afterwards the arm of the same side, and the patient lost consciousness; he fell, bit his tongue, and urinated; an instant after, he rose stupified and stooped, and without any memory of what had taken place after his fall. On the 14th of May he had a fresh attack, and from that time forward numerous accesses, at intervals of shorter or longer duration. This patient was apprised, from 24 to 48 hours beforehand, of an approaching attack, by an aura in form of the sensation of cold water running from the cicatrix on the heel. Sometimes the convulsions were generalized without loss of intelligence, in this case the initial phenomenon was always the aura in the left heel, followed by disturbances in the leg, the thigh and the arm; afterwards he felt a sense of constriction in the throat, oppression and difficulty in the respiration; lastly, the arm

and leg of the *right* side were seized by tonic and clonic convulsions, and the attack ceased without loss of consciousness. This case very clearly demonstrates the route of the centripetal irritation, now extending itself simply to the medulla and to the bulb, and then advancing to the encephalic centre, carrying thence the loss of consciousness.

Larrey relates the case of a soldier, in whom accesses of epilepsy were produced after an operation at the bend of the elbow, in which the internal cutaneous nerve was wounded. The patient felt a keen pain at the level of the cicatrix, followed by a sensation of cold, which ran through the tract of the nerve; convulsions immediately succeeded. Several small moxas along the course of the nerve, and applications of a little potassa on the same parts, caused the accesses to disappear. S. Wilcks, in his *Latures on the Diseases of the Nervous System*, relates a short analogous observance of a case of wound on a finger. Other examples of the same sort, with phenomena of choreic form, are known. Prof. Wier-Mitchell gives a very fine example, cited from Dr. Packard, in which the chorea had its origin from a traumatic lesion of the nervous filaments of the thumb. Malden cured a chorea by extraction of a carious tooth. Charcot, in his lectures *On Diseases of the Nervous System*, has related the history of a lady who, by falling from á carriage, suffered a contusion on the left thigh. After some time she felt in the injured limb a sharp pain, along the course of the sciatic nerve, and shortly after a tremor in the whole leg. At first this tremor was transient, but it became afterwards permanent, and extended to the whole limb.

B. *Phenomena of depression.*—These phenomena may take place, now in a member corresponding to the irritated nerve, again on the opposite side, or yet in a member, or a group of muscles, more or less distant from the injured part. Here are examples:—Larrey, in his memoirs of military surgery, relates that in the Syrian campaign the slightest wounds were very frequently followed by complete paralysis of the corresponding limb. He explains this paralysis as proceeding from lesions of some superficial branches of the cervical pair, under the influence of the asthenic and stupifying qualities of the climate of Syria in the hot season, in which these accidents took place. Brown-Sequard relates a case of paralysis of both arms, following a displacement of the ulna; the paralysis ceased with the cessation of the traumatic pathological condition, and did not again appear. Boyer relates another case similar: the reduction of a luxation of the left ulna was followed by paralysis of the forearm, and some time after by paralysis of the corresponding lower limb. Wier-Mitchell publishes many cases of paralysis in regions distant from the lesed parts, and he associates the facts with cases of cerebral irritation consecutive to traumatism; he explains them as a species of local determination from the nervous commotion received. Many other authors cite examples of the same class,—as Marshall Hall, Kennedy, Rochè, and Goyot. We shall record only the observations of Rochè, as the most striking: a student of medicine, after the extraction of two molar teeth from the upper jaw, was seized with atrocious pains and convulsions in all his members, and finally with complete paralysis of the left arm; speech was lost, but his intelligence was perfect. After a quarter of an hour, he felt a formication in the paralysed member, and in an hour the functions of the arm were completely re-established; he recovered speech at the same time.

ARSENICAL POISONING.

BY A. C. BOWERMAN, M.B., BLOOMFIELD, ONT.*

(Continued from page 203).

Arseniuretted hydrogen gas, containing one grain of arsenic to the cubic inch, is a most deadly poison, and at a moderate heat arsenical compounds pass into a gaseous state; while Dr. Tidy tells us that volatility and virulency usually go together. Now if our walls are hung with paper containing from 14 to 17 grains of arsenic to the square foot, or even a much smaller quantity, the amount of this noxious gas set free in a room exposed to a midsummer's heat, or even to that of our common wood or coal fires, must be sufficient to produce many of the symptoms of arsenical poisoning; for we have already seen that many evil effects arise from the use of arsenically colored lamp shades—as the metal is decomposed by the light and heat of the flame. How easily the symptoms thus produced might be masked by other less characteristic ailments; and how readily one might thus overlook

* Read before the Quinté and Cataraqui Medical Ass'tion, Feb. 1, '82

this grave cause of a most alarming condition in our lack of proper sanitary precautions !

An eminent English authority (Groves) says, "The frequent occurrence of arsenical poisoning from paper hangings is very generally overlooked by medical men, many even when it is pointed out will not believe in it. This arises no doubt in most instances from the symptoms which are produced being so various and having such a strong resemblance to symptoms arising from totally distinct causes." It is a fact to be remembered, as observed by Bartholow, "that in consequence of the high degree of inflammation which arsenic excites when applied externally in sufficient strength, absorption does not follow its local use ; but *weak* applications may excite dangerous symptoms by diffusion into the blood." It is likewise a physiological condition of the blood to offer an alkaline reaction, and being separated from the surface by a thin endermic membrane only, an osmotic flow is readily produced through this membrane—from without inwards, whenever an acidulated application is made to the integument—(and arsenious acid offers a feebly acid reaction in solution). The facilities for the absorption of this noxious element are thus seen to be all that can be desired in the way of activity and certainty. Bartholow, in his Therapeutics, says, "Symptoms of poisoning follow the inhalation of arsenical fumes. Numerous instances have occurred in which wall-papers colored with arsenical pigments have poisoned the occupants of an apartment. Garments colored with aniline dyes fixed by arsenical mordants, have induced local ulceration and systemic symptoms, from absorption of arsenic. Applications to a large portion of even unbroken integument have in numerous instances excited dangerous symptoms and produced fatal results."

I have previously noticed that the inhalation of arseniuretted hydrogen gas is attended with most disastrous consequences. Quoting from Mr. Carr, I find that Dr. Fleck, from confirmatory experiments, concludes "that there can no longer be any doubt of the possible presence of arseniuretted hydrogen gas in the air of a room hung with paper which is colored with arsenical green ; that the evolution of gas takes place on account of the joint action of moisture, etc., of organic matter (especially such substances as are used in fixing the paper to the wall) ; and that wherever free arsenious acid is in contact with organic substances, the evolution of gas is possible. The danger is therefore not confined to green, but may arise from any color which contains arsenic." Prof. Roscoe says, "Hydrogen is evolved during the growth of mould and certain fungi, and it is possible that if arsenic compounds are present where such growths are going on, arseniuretted hydrogen may be evolved. This (he says) may perhaps explain the evil effects noticed when arsenized wall-papers are employed." It might not be amiss to bear in mind that, according to so valuable an authority as Roberts Bartholow, "recovery from the effects of acute arsenical poisoning is rarely complete." Once having recognized this fact, I think it would not be long before every article suspected to contain arsenic would be excluded from domestic use.

A well marked difference is known to exist between the symptoms produced by arsenic taken *per orem*, and those arising from its action in the form of gas or dust. As pointed out by Bartholow, the administration of arsenic in even medicinal doses is not unattended with danger, in consequence of the individual idiosyncrasies to the action of this metal. The following cases, under my own limited observation, will serve to illustrate the extreme susceptibility of some persons to the administration of pharmaceutical preparations of arsenic.

A. B., æt. 28, male, delicate and of sedentary habits ; troubled with an obstinate pityriasis, was ordered the following prescription :

℞—Elix. ferri et calisaya, ℥iij.
Fowler's sol. of arsenic, ℥ij.—M.
Sig.—A teaspoonful three times daily, after eating.

The above preparation of Liq. Arsen., I think, was made after the U. S. P., conseqnently each drachm contained about a ½ grain of arsenious acid. One grain was therefore the total quantity put into the prescription, and although the whole quantity was not taken, yet the result was nearly fatal. The medicine was first taken on Tuesday, after dinner, again after tea, and again on Wednesday, after breakfast. Not being content with this, the patient, in his eagerness to accomplish a cure, took a dose during the interval more than was ordered, thus taking five or six doses daily. For some days previous to the exhibition of this remedy, the man had been suffering from an acute

bronchitis with considerable expectoration. Bartholow says, "Arsenic stimulates the cerebral functions and induces a feeling of well-being, and in some subjects, decided mental exhilaration." On Wednesday our patient experienced great exhilaration, amounting almost to intoxication; but on Wednesday night a severe constricting headache supervened, with restlessness, sleep disturbed by nausea, great tenderness over epigastrium, with occasional colicy pains. On Thursday the remedy was continued irregularly, the cough had become loud, harsh, and had a metallic ring; voice grating and expectoration very difficult. The tongue was covered with a white coating, except the tip and edges; the face presented a pinched expression; eyes sensitive to light; eyelids swollen at the inner angle; constricting headache; considerable nausea and want of appetite. Severe pain in the back obtained from the first; palpitation of the heart became excessively painful. Frequent retching prevented much sleep on Thursday night, while all the above symptoms became more exaggerated on Friday, when a settled condition of melancholy prostrated the patient. Cold chills now came on, with sighing, yawning and frequent hiccough. Nothing was taken but some mucilaginous drink, and the cause faintly suspected. About 3 a.m. of Saturday, however, the patient awoke in great distress, as if apprehending some calamity. The physician on visiting him, found his condition as above described and with the face now puffed out like a blister, eyes nearly closed, violent and most painful palpitation, nausea, griping pain in the abdomen, pain in the back, etc. The patient remarked a peculiar flash, as of an electrical spark, in the outer side of the right eye; this remained and gave considerable annoyance for some weeks after abatement of the other symptoms. Stimulants, diaphoretics, etc., with mucilaginous drinks were administered freely and continued through Saturday and Sunday, when all the alarming symptoms abated. On Monday evening patient left his bed, still however complaining of great prostration. In the above case so near a fatal termination, less than a grain of arsenious acid was taken, in not less than 15 or 16 doses, and spreading over a period of about 72 hours. It is now manifestly impossible, in view of the above, to accurately estimate the individual susceptibilities of people to the action of this remedy, until we have prescribed and carefully watched against any untoward results, when the administration may be immediately discontinued.

The second case coming under my notice was that of a boy, æt. 4, suffering from chronic eczema since early infancy. I have good authority for saying that he had been taking Fowler's Sol. of Arsenic for about four weeks, but in what doses I do not know. The medicine was ordered by a physician some miles distant, and the child had only been seen by the doctor twice since the remedy was begun. Nothing unusual was remarked by the mother, except frequent nausea, until the period of which I am speaking, when, after eating immoderately of currants and raspberries, the child was seized with vomiting, intense thirst, fever and great abdominal pain. These symptoms having been attributed to the excessive ingestion of unripe fruit, an enema was ordered, which had the effect of removing a great quantity of impacted fæcal matter, composed largely of the seeds of the fruits eaten. Much relief was given by this course, but only of temporary duration. Vomiting was with difficulty arrested for short intervals. The specific cause in this case was not even suspected by me, until the vomited matters assumed a bluish-green color not unlike solution of sulphate of copper. Dr. Ingersoll of Picton was now called and diagnosed the case, beyond doubt, as due to arsenical poisoning. A fatal result seemed inevitable, and all efforts to the contrary were unavailing, the child dying in the utmost conceivable agony about 36 hours after my first visit.

I submit to the judgment of the gentlemen present, whether in this case the administration of arsenic would have been injurious, had not the excretions been suspended by the ingestion in immoderate quantities of unripe fruit, and thus preventing the elimination of the metal by the natural outlets?

A third case, of a middle-aged lady, cancerous diathesis (as diagnosed by a Rome, N.Y., specialist). She always speaks of the cancer-humor (whatever that is) affecting her in most unaccountable ways; and under the advice and attention of this same specialist, she takes considerable quantities of his celebrated "Cancer Remedy," which I am told contains arsenic. These "cancer cures" are not unfrequently met with, and I am informed that most of them contain arsenic as an ingredient

in their composition. These are generally prepared from secretly held formulæ of supposed value, and I believe are most diligently dandled before the eyes of victims to every sort of humor, by those gentlemen prematurely delivered into our honorable ranks, and who advertise themselves after the following manner, viz.:—

Dr. ——, Physician, Surgeon, Accoucheur, Coroner for the Co. of ——, (Specialty, the Treatment of Cancer and all diseases originating from impurities of the blood).

It was after a dose of some one of these nostrums that our patient found herself in a condition closely bordering on that sort of permanent relief seldom desired on the part of our patrons. As only a single dose had been taken, the result fortunately was not fatal. Now until it is thoroughly understood that arsenic forms so prominent a factor as it does, in the preparation of a multitude of articles of daily use, the deleterious effects of its inhalation and absorption, in even small quantities, must continue to be overlooked, and as a consequence be passively permitted to still obtain. Mr. Carr says, "The question whether one is poisoned by dust or is a matter of interest to the medical profession, but it is of little consequence to the public." And likewise he says, "The consideration of arsenical poisoning at once raises the question of freedom of action. Perfect liberty consists in freedom for every man to do that which is right in his own eyes; but it certainly is not a justifiable use of freedom for manufacturers to saturate our walls, furniture or clothing with subtle poisons, which, by impregnating the air we breathe, frequently produce serious illness and often have led to loss of life." The manufacturer takes advantage of the purchaser's ignorance and thus effects a sale of goods that he well knows would be shunned by every intelligent person, were he to append to his wares a label to the effect that they were goods highly impregnated with arsenic or any other subtle poison.

From this standpoint the matter becomes a question of great public importance, and to eradicate the evil the necessity is equally important, of securing requisite legislation to this effect; for while we encourage immigration, should we not by every legitimate means in our power, endeavor to protect the lives of those people who are becoming citizens of our Dominion, and not by neglect be guilty of impairing or destroying their own and their children's health and thus striking a fatal blow at the very root of our anticipated national future, when all this can be remedied by the prohibition of poisonous materials designed for domestic use? The Prussian, French and Bavarian governments forbid the manufacture and sale of wall-papers colored with arsenical pigments. Much effort has been made in Great Britain to obtain similar legislation, but the only good result has been to render the sale of *small* quantities of unadulterated arsenic very difficult, while the manufacturers of wall-papers boast of using tons of the crude article per week. As it generally, I believe, falls within the province of the medical profession to institute the initiatory proceedings in every department in which the public health is concerned, I submit that it can scarcely be considered out of place that this question should originate in a medical association, and its merits be discussed by those best qualified to estimate the importance of its consideration.

In conclusion, Mr. President, I ask, would it not be wise, in view of the authorities from whom I have quoted, to urge the adoption of legislative acts to render illegal the manufacture or sale within the Dominion, of any poisonous materials of whatever form, unless it be distinctly stated to the intending purchaser that the articles used or exposed for sale are of a highly dangerous character? Considering that in nearly every case my authority has been English, and that a very large per centage of manufactured goods—including wall-papers—are imported from England, the necessity for an enquiry into this question is by no means lessened; and I respectfully suggest that this subject be brought to the notice of Parliament, in connection with the movement for the promotion of better sanitary regulations throughout our provinces.

FROST BITE NECESSITATING DOUBLE AMPUTATION.

BY JAMES GRANGE, M.D.,

Physician and Surgeon to the Royal Cariboo Hospital, Barkerville, B.C.

S. F. A., aged 39. Had been drinking some in the morning of Monday, Nov. 14th, Taking some brandy with him, he started for the Horse Fly Country from the Forks of Queensville early in the day, by way of Beaver Lake trail. When about eleven miles out he was wholly overcome with

drink, and falling asleep he did not return to consciousness till aroused by a passing Chinaman on Wednesday, about two o'clock p.m., having slept about fifty hours on the snow covered ground without covering or shelter, the thermometer indicating more than ten degrees below zero at the Forks, a valley probably five hundred feet lower. The Chinaman, not being able to get him along, hurried on to the Forks for help.

Meantime the poor man being exceedingly thirsty made his way to a brook about fifty yards distant. In this effort he first discovered that his feet were both frozen. One elbow was slightly frozen, but his hands had almost wholly escaped as he had thrust them in his bosom. Having taken a large draught of water he felt very weak and chilly, and was obliged to lie down again a short time. Then seeing his horse a little way off (for the faithful animal had not left his master, a circumstance not uncommon in this sparsely peopled region), he undertook to saddle him, but his strength failed and he was obliged to lie down till help came from the Forks, which arrived about six o'clock. He was first given a little brandy, then a fire was kindled and he was warmed, keeping his feet from the heat. Hot tea and some food were given him but he could take very little. He was then placed on horseback, and after a weary ride of four hours reached the Forks at about three o'clock Thursday morning. The frost was then extracted by placing the feet in ice-cold water, and rubbing them with the hand. The attendants say the parts were frozen solid to near the middle of the leg. Five hours were spent in removing the frost. After resting till Saturday morning, he started on horseback, some friends accompanying him, for the Hospital, making Keithley Creek twenty-two miles the first day, Sunday made Snow-Shoe Creek, twelve miles, Monday made Antler Creek, sixteen miles over the mountain, the snow reaching to the horses sides, Tuesday reached Barkerville, fourteen miles.

The difficulty of making this journey will be more fully realized when it is understood that this region of country is composed of very uneven ground, steep hills to climb and deep valleys to cross over most part of the trail. On his arrival he was admitted to the hospital, Nov. 22nd. The patient had endured the journey much better than was expected. Was quite cheerful, in very little pain, appetite pretty good, evacuations natural, sleep not much interrupted, pulse 84, line of demarcation beginning to form a little below the middle of the tibiæ, feet cold and of a very livid colour.

I expressed the opinion that the feet would have to be amputated ; but as a different opinion had been given by a party here professing considerable medical skill, though he had never heard a lecture on medicine (for we have empirics here as well as in other parts of the Dominion), I was unable to get the consent of the patient till Dec. 6th. By this time nature had done so much towards amputation, and the patient was suffering so much loss that all opposition was withdrawn. Having procured the best assistance I could I proceeded with the amputations. The patient, though a large man of superior physical powers, went under the influence of chloroform without any difficulty. Large warm flax seed poultices had been applied, enveloping the feet and reaching nearly to the knee and changed twice daily, and the parts had been washed with carbolized water at each dressing. The parts above the line of demarcation were not swollen and appeared perfectly healthy, so I formed the flaps from a point about three inches above the line. The operation was not done very quickly. All being completed, I noticed that it lacked about ten minutes of an hour since the patient began to inhale the chloroform. Soon after the operation the pulse fell to 62 ; administered stimulants. Reaction set in in about two hours. During the next two days the pulse reached 116, after which it gradually fell to 80. The wounds were carefully washed with carbolized water and dressed with cloths dipped in the same. The dressings were wet twice daily with the same antiseptic, and not removed till the eighth day when the wounds were found united by the first intention. I think it very remarkable that so serious an operation should be followed by no untoward event, after such terrible exposure and so much delay before operating.

THE next meeting of the International Medical Congress will be held in 1884, in Copenhagen, Denmark, under the presidency of Prof. Panum.

A HOSPITAL and Accident Ambulance Service has been established in London, England, through the exertions of Dr. Benjamin Howard, of New York.

ENCYSTED DROPSY OF THE PERITONEUM—WITH CASES.

BY J. KNOWSLEY THORNTON, M.B., C.M., ETC.
Surgeon to Samaritan Free Hospital for Women, London.
(Reported for the CANADA LANCET, *by Allan Baines, M.B., L.R.C.P., etc., London.)*

The main parts of the paper are taken from notes read by Mr. Thornton at the meeting of the Harveian Society, January, 1882, with some few clinical notes by Dr. Baines, who witnessed the progress and operation of the cases. Encysted dropsy of the peritoneum is a very rare disease, and very little is to be found about it either in the general or special medical text books. The fact that two cases have occurred in Mr. Thornton's hospital practice in the last three months, shows, however, that it is a disease which we must be prepared to meet with occasionally, and diagnose from other abdominal enlargements. This differential diagnosis is very important for the proper treatment of the case, and at the same time it is extremely difficult. It is doubtful if any other form of abdominal enlargement offers the same difficulties. Before proceeding to consider these particular cases and the lessons we may learn from them, we may briefly refer to such cases noticed by others, and to such general information on the differential diagnosis as the text-books afford. Mr. Spencer Wells, in his work on diseases of the ovaries, records one case at pages 134 and 465; on the former page he gives some particulars of the case, and on the latter he tabulates it among the incomplete ovariotomies. Mr. Wells diagnosed ovarian cyst, and tapped the patient without discovering the error, and when she refilled, proceeded to perform ovariotomy. The incision revealed a cystoid cavity formed by floor of pelvis, matted intestines, and parietal peritoneum. The uterus and ovaries were in this cavity, the former roughened and the latter large. The cavity was sponged out and the incision closed. The patient was well two years afterwards. One of Mr. Thornton's cases will be seen to closely resemble this. Mr. Wells states that McDowell and Henry Smith, of the United States, have each recorded a similar case, and Peaslee in his work on ovarian tumors, states that Boinet had met with two cases in men and one in a woman. Peaslee himself had seen a case in each sex, and says, on what authority or ground it is hard to say, that the disease is more common in the male than in the female. He also speaks of it as an extremely rare pathological condition. Dr. West, in his work on Diseases of Women, says: "I am aware of no means by which such cases are to be discriminated from cases of ovarian dropsy; as far as I know, their nature has scarcely ever been detected during the lifetime of the patient." Peaslee, in his chapter on the differential diagnosis of ovarian and other abdominal enlargements, devotes a special section to the consideration of encysted dropsy of the peritoneum. He says that it is preceded and produced by peritonitis. The fluid lies above (in front of) the intestines, the latter being bound down by adhesions, and sometimes extends over the whole anterior aspect of the abdomen, being divided into several divisions, while in other cases it is bound down by narrow limits. The abdomen is not prominent but flat. In this last statement he is partly wrong as Mr. Thornton's first case proves, and he goes on to give a tabular statement of the differences between encysted dropsy and ovarian cyst, in what he calls the third stage, under thirteen, which will not be reproduced, as ten out of the thirteen are incorrect or partly so—tabular statements as a rule being very unreliable and misleading. Peaslee is a most indefatigable collector of information, and of large experience, but is greatly inclined to generalize from insufficient data. The number of cases that have been as yet carefully recorded, render it impossible to give with any accuracy the distinguishing features of the disease. The details of Mr. Thornton's two cases are as follows, but before giving them it would be better to call attention to the fact, that the condition we are considering is entirely different from the much commoner condition in which partial collections of fluid may occur in the peritoneum as a result of the presence of malignant disease in some of the organs which it clothes. In some of the brief allusions which may be found regarding encysted dropsy, this distinction does not seem clear, and the observations are therefore of little value, and probably not worth referring to except as a note of warning.

E. S., æt. 45, married 21 years, and mother of seven children, entered the Samaritan Hospital under Mr. Thornton's care, in October, 1881. She had been sent in by Dr. Bradbury, of Cambridge,

who believed her to be suffering from ovarian tumor. The only notes Dr. Bradbury could give concerning her early history were: "I only saw her once, and then there was no kidney mischief or at least no albuminuria. I thought her a case suitable for ovariotomy." *Family history.*—Father died of old age; mother of cancer of breast, æt. 50; brothers and sisters healthy. *Own history.*—Has always been healthy; illness commenced two years ago with violent attack of retching, pyrosis and headache. Increase of size was first noticed at midsummer, 1881. The swelling was in the left iliac region, and was accompanied by a good deal of pain. Increase of size was rapid and continuous up to the date of admission. Menstruation used to be very regular monthly up to the date of admission. During the last three months it has been every two weeks and free for a week. The bowels have been loose. After the death of the patient, Dr. Bradbury referred Mr. Thornton to Dr. Ransom, of Cambridge, under whose care the patient had been during the early part of her illness, and he kindly furnished the following notes:

"I first saw Mrs. S. in February, 1880—she then was suffering from severe headache, vertigo and vomiting; there was slight œdema of the feet; urine albuminous and loaded with casts; eyesight becoming defective. There was a previous history of ague. I considered the case one of uræmic poisoning from considerably advanced renal disease. I also found during my examination of her, a swelling on the left side, projecting underneath the costal border, forwards and downwards into the abdomen, about as large as a lemon, dull and not tender, which I thought was the enlarged spleen. In January, 1881, I saw her again; she was suffering from very severe pain in the left side over the before-noted swelling; had had diarrhœa, cold chills and vomiting. Temperature 101°. The urine contained only a trace of albumen. I thought the case one of inflammation of the peritoneum or spleen, or both, from enlargement of the latter. She got much better, and under the use of arsenic the swelling lessened. In September following she called on me, believing herself to be pregnant. I corrected this impression, and gave her a diuretic mixture and never saw her again. *State on admission.*—Much emaciated—facies markedly that of an advanced ovarian case—abdomen greatly distended, the parietes so œdematous that accurate examination was difficult, but there was clearly a large collection of fluid chiefly to the left side, and completely surrounded by distended intestines, both flanks and the epigastrium being clear. There appeared to be a slight wave of free peritoneal fluid in front of the intestines at the upper part of the abdomen. The vulva was so œdematous that vaginal examination was also difficult, but the uterus was found pressed down, os patulous and granular, cavity 3½ inches; uterus mobile, no evidence of close connection with tumor, urine scanty and loaded with urates sp. gr. 1030, acid reaction, no albumen; tongue flabby and fissured; appetite good; much troubled by flatulence; bowels loose; both legs and feet very œdematous; left especially so. The patient was bright and cheery and able to move about briskly, and was very helpful in the ward to the other patients. Mr. Thornton was in much doubt as to the nature of the case, but was inclined to regard it as one of colloid (semi-malignant) with intestinal adhesions all round it; circumstances delayed operation longer than he had intended, and on October 28th he found her in bed and complaining of great pain in the abdomen. On examination the shape had entirely altered; there was evidence of much free fluid in the peritoneum, and the œdema of the parietes had sensibly decreased. The abdomen was resonant in front, and very tender; pulse 120; temp. ran up rapidly to 104·2; next day to 104·8. Mr. Thornton treated the case as one of rupture of cyst into peritoneum. The temperature gradually came down and the pain subsided. On the morning of November 2nd the patient did not look at all in a promising condition. Pulse 124, temp. only 99·6, lower than it had been. On enquiry found she had been vomiting, and that the urine had become very scanty and of a dark mahogany color. Later in the day finding that ordinary treatment had not relieved the kidneys, and that suppression was almost complete and patient comatose, Mr. Thornton tapped the peritoneum and drew off 21 pints of semi-purulent fluid which appeared very like a mixture of ovarian and ascitic fluid. The tapping gave great relief, and with constant poulticing over the loins and milk diet, she steadily improved though vomiting of large quantities of bilious fluid was troublesome when reaction first set in after the tapping. During the whole of this attack the urine

was free from albumen but loaded with granular casts. A few days after the attack, when the kidneys were beginning to act better, there was blood in some quantity in the urine, and from this time she went back. The mind was frequently clouded and pulse and temperature very uncertain, varying from day to day and hour to hour; the urine scanty, high-colored, and albuminous, and diarrhœa alternated with constipation. There was no rapid reaccumulation of fluid after tapping, but tympanitic distension was great and the patient was much troubled by its pressure on heart and lungs. She gradually passed into a low typhoid condition, and died on the 21st November, rather more than three weeks after the sudden rupture. Mr. Allan Doran made a *post mortem* and found uterus and ovaries fairly healthy, the latter free, the former bound to the sigmoid flexure by an old and strong band of adhesion; the intestines, omentum, etc., were much matted, and the fluid had been confined at first by these adhesions to the pelvic and hypogastric regions. The right kidney was of normal size, but in the early stage of granular degeneration; the left kidney was practically destroyed; the spleen was large, 12 oz.; the parietal peritoneum was unusually thickened and injected; there were nearly two gallons of orange-colored turbid fluid in the peritoneal cavity.

Mr. Thornton's second case, exactly a week after the death of the first, having been transferred to his care by his colleague, Dr. Percy Boulton, as a case of broad ligament cyst.

A. B., single, age 17, not emaciated, but anæmic and delicate-looking, was admitted November 28, 1881. Father, mother, two brothers and five sisters, all alive and very healthy; has never had any serious illness herself; menstruation in every way regular.

Five months back first noticed increase of size, and the increase being markedly more rapid during the last two months; was not ill at first, but two or three months back had sudden attack of pain in left side with difficulty of breathing, and was unable to lie down for three days. The doctor who was called in said that the water had gone to her lungs and heart.

Condition.—The abdomen is unusually flat for a case of cystic disease, but is if anything slightly more prominent at the lower third and to the right side. Fluctuation quite distinct and not so defined at upper part as usual; there is also a greater source of resistance in manipulating than there would be with free fluid. The upper part of the abdomen is clear and the fluctuant area cannot be displaced or a clear note elicited by deep percussion. When lying well over on left side the dull area on right flank remains decreased, but still can be brought back along crest of ilium into right loin. The left flank is clear when she lies on her back.

The previous case being still fresh before us, and the patient's appearance suggestive of tubercular mischief, the examination was made very carefully and every detail fully weighed so as to make a determined diagnosis between encysted peritoneal fluid and a flaccid broad ligament cyst, but a satisfactory conclusion was not arrived at; however, the opinion arrived at was, that it was a flaccid cyst, for the following reasons:—

1. The change in position of patient did vary the area of dullness more than is often seen in cases of flaccid cyst.

2. Deep pressure around the margins of the fluid did not so displace it as to enable one to get a clear note.

3. When turned on left side the dull area still remained in right flank along crest of ilium, and far back into right loin.

Mr. Thornton being still doubtful of diagnosis, pointed out to those present what he considered the doubtful points.

A small incision having been made, and the peritoneum being opened, it was seen at once to be in a diseased condition, and appeared to be in same state as that described by Mr. Spencer Wells, the uterus and ovaries projecting far into the lower part being coated with a soft black yellow lymph which also coated the walls of the cavity and in some places hung from them in large membranes. The cavity having been carefully sponged out, (after draining off about twenty pints of turbid fluid) and all lymph that could be detached removed, the incision was closed, no drainage tube being used. As antiseptics were used, any fluid reaccumulating would be harmless, and the sponging with carbolic acid, it was hoped would cause sufficient irritation to set up healthy action in the peritoneum, so that any small quantity of fluid being poured out soon after the operation, would be reabsorbed.

Mr. Wells' case shows that the same result may

be obtained without Listerism, but one might have hesitated to close the cavity entirely, without a drainage tube, had any doubt been felt as to its asepticity. Fear was felt that the intestines falling in to fill up this cavity, might have become kinked, the abdominal walls and peritoneal cavity having been fairly distended with the fluid, (seven pints), but this proved a groundless fear. She had not the least trouble with her flatus, the bowels acted well on the seventh day after an enema. She was up and walking about on the 14th day, and left the hospital the 20th day after the operation. The highest temperature was 100·8° on the afternoon of the second day, and the highest pulse 112 on evening of the first day. There was at first a depression where the fluid had been, but this gradually disappeared and the abdomen was resonant everywhere on the day she left the hospital, and no indication whatever could be found of any reaccumulation; most probably the adhesions which bound the coils of intestines together and to the peritoneum would gradually yield to the pressure from above, and that as the intestines descended to fill the space left by the removal of the fluid, the lymph which bound them together would become gradually reabsorbed and disappear.

Mr. Thornton concludes by saying: With regard to the cause of this encysted dropsy of the peritoneum, I think we may accept Peaslee's statement, that it always follows, and is the result of peritonitis. I should be inclined to say local peritonitis. When we go farther back and seek for the causes of peritonitis we have a much larger field opened to us. The first of my cases shows that the condition may arise in a patient with advanced kidney disease. We know how subject such patients are to inflammation and effusion from serous membranes, and I think it not at all unlikely that the tumor first detected by Dr. Ransom was, as he supposed, an enlarged spleen, and from the irritation caused by this or from actual inflammation of its peritoneal covering the effusion first took place.

It is quite clear from the *post mortem* that the fluid was confined at first much as it was in the second case, but more to one side, the left, and reaching higher in the abdomen. The breaking apart of the adherent intestines allowed it to become generally diffused, and led to the condition which so closely resembled rupture of an ovarian cyst. It was fortunate I had not attempted operation in this case, for the result would probably have been to hasten the uræmic condition, which ultimately proved fatal. I do not propose to dwell further upon the conditions in either case which helped or hindered diagnosis, because I think we must have many more accurately recorded cases before we can hope to avoid the errors into which Peaslee fell. I think, however, that we are in a position to say that in any case of encysted dropsy of the peritoneum, diagnosed as such in a patient with healthy kidneys, the proper treatment is abdominal section, removal of the fluid, and carefully clearing out of the sac and sponging with a mild solution of iodine, and I would add that provision for drainage is not needed. It is hopeless to expect unanimity as to the value of antiseptics in such cases; but for myself I can say that my opinion formed after my large experience of both non-antiseptic and antiseptic abdominal section is so decidedly in favour of the latter that I feel bound to give my patients the immunity from various sufferings and discomforts afforded by Listerism. These views have not been shaken by the results of my ovariotomies. At the Samaritan Hospital in the past year I have not drained a single case, and I have had only two deaths in 44 ovariotomies, and both occurred in young patients from whom I had removed solid malignant tumors.

Correspondence.

MEDICO-LEGAL EXPERTS.

To the Editor of the CANADA LANCET.

SIR,—For years past, almost the only hope to which assassins and their counsel clung, was insanity, and it becomes us as professional scientists to carefully investigate this subject, that we may thereby give an opinion, the veracity, or scientific value of which, will not be questioned, such as was lately witnessed in the testimony of experts in the Guiteau trial.

Insanity being a subject that requires the most careful study and minute investigation, is apt oftentimes to be slighted, while college study is being pursued, and while clinical observation could be made, hence many of our professional brethren receive their degree without a proper

knowledge of this important subject. Why wonder then that only expert testimony is taken into account, in our so-called—Tribunals of Justice—when we are fully cognizant of the fact, that only a few, have made insanity a special subject of study, and have had opportunities of clinical research. But it is questionable, whether the evidence given by the "so-styled" experts is always in accord with the true condition of the patient. They often have only a limited time in which to base their opinion. They often only see the patient once, and the evidence given by them will depend chiefly on the condition in which the patient was at the time of the examination. True, it could not be otherwise, but when a doubt exists in the mind of the examiner, repeated examinations should be made, and greater satisfaction and unanimity of opinion would exist, if this was made a general rule before evidence is given. All observers of the insane, have noticed the so-called fits of temporary insanity in those under their charge. These fits may only occur once or twice yearly, and may last from a week to a month or longer at a time. Just what causes these fits at times, is not definitely known; but that they do occur is undisputed. A medical examination made during one of these fits, would naturally be opposite to that taken when no such "spell" exists, and the great variance in regard to medical testimony given in court, is to be found often in the varied condition of the patient at different times of examination.

No physician who has followed the testimony of the medical experts in the Guiteau trial, will say that the evidence given, was of such a nature, that no room for doubt existed, or that the testimony given from a medico-legal aspect, was at all conclusive. Nay, more, it has to no inconsiderable degree lessened the value of expert testimony in the public mind; and has been the cause of intense mortification to the profession.

It may be said, and truly, that Judge Porter, and public sentiment, found Guiteau guilty, irrespective of medical testimony; yet, there are not a few in the medical profession who fully share in the belief that Guiteau was acting under a delusion when he shot the President.

I am, &c.,

Standish, Mich., P. STUART, M.D.
Feb. 13th, 1882.

OVARIOTOMY BY SPECIALISTS.

To the Editor of THE CANADA LANCET.

SIR,—I notice in the February issue of the LANCET, an article from the pen of Dr. McLean, of Ann Arbor, Mich., on Ovariotomy, in which the Dr. states that within a period of nine months he had performed ten ovariotomies, and of the ten, ten recovered. I think the doctor must be drawing upon his imagination, for some of his facts—as I am aware that in one case where he operated within the last nine months, the patient died shortly after the operation. I do not wish to insinuate that it was owing to any want of dexterity on the part of the doctor; but I take exception to the general tone of his article. It might be excusable did it emanate from a man of half a century's experience in the field of obstetric surgery, but coming as it does from comparatively a young surgeon, it partakes too much of the character of egotism, and is calculated to deter rather than encourage young surgeons who may be just as ambitious as Dr. McLean, to do good.

The Dr. states that the operation requires so much experience and dexterity that it should be confined to specialists. Here I must beg to differ with him; the operation is as easily performed as even many of our minor operations, the chief end of the battle is in the character of the case and the after treatment. The late Professor Syme, of Edinburgh, the man by whom Dr. McLean used to swear, states that the success is chiefly owing to "The more accurate discrimination of cases." And in this connection permit me to observe that in a practice of eighteen years, some of the most lamentable failures I have met with, have been left behind as tokens, by so-called experts and specialists; in fact life is often sacrificed as the result of dexterity. I think it should be the duty of every surgeon who meets with success, to encourage others, rather than deter them. Patients are not always able to go to specialists, or to pay $1,000 for an operation, when they might have it as safely and as carefully (if not so dexterously) performed by their family doctor.

I am, yours truly,

SURGEON.

[In the abstract of Dr. McLean's paper referred to by our correspondent, "ten" recoveries was a misprint for seven.]—Ed. LANCET.

ELECTRICITY IN SPASMODIC STATES.

To the Editor of the CANADA LANCET.

SIR,—It is not my intention to reply to your esteemed correspondent, Dr. A M. Rosebrugh, at much length. Permit me merely to state, that, those portions of the lectures of Dr. J. Russell Reynolds from which Dr. Rosebrugh quotes, appear to me, to express, not so much the personal views of that author, as to indicate current opinions as to the conditions in which electricity "may" be useful. In the absence of some such explanation, Dr. Reynolds' book might seem very contradictory. For example, on page 66 he tells the reader that certain effects "may" be produced by electrical treatment; among others, you "may stop" the spasm of torticollis, &c. In a future page, he gives the result of his own extensive experience, and says:—"In torticollis, *for the time being*, you can put the head straight either by a strong battery current, passed through the contracting muscles, or by faradization of the other side, the muscles of which are often weak; but *directly you cease the application, the head goes back again to its abnormal position.* I have obtained similar negative results in cases of both writers' cramp and histrionic spasm," (p. 102). Now, to have told us previously that we "may" apply electricity in these cases, is not to say much in its favor, with results like these as its practical outcome. Observe, that in the above quotation, both forms of electricity were used, and the method of application varied, so that there is but little chance of any better success in the hands of others.

It is true, that other writers report "good results," "temporary improvement," and that this agent may be used with "advantage"; but these are not cures; and we all know that enthusiastic introducers of new therapeutic agents generally credit them with curative powers which further experience shows to be illusory. Such indirect evidence as that electricity "may" be used, etc., and that it "may" relieve, etc.,—a form of expression which occurs from sixteen to twenty times in Dr. Rosebrugh's quotations, is not to be compared to the positive testimony, the result of extensive experience, under favorable conditions, deliberately recorded by Dr. Reynolds, in which, writing of the "*forms of spasm in which electricity has been most commonly used*," he says,—"I have tried it again and again, in every available form, but have never seen it do any good," (p. 102). Now, surely there is here a sufficient "hint" as to "Dr. Reynolds' real estimate of the value of electricity in spasmodic diseases," which it is suggested I omitted to convey. I preferred to accept the practical results of Dr. Reynolds' experience, of the use of electricity in spasmodic states, rather than the fugitive reputation it had acquired; to which this eminent teacher appeared to refer in his earlier remarks.

The question at issue, after all, is one which the intelligent readers of the LANCET can very readily solve for themselves, and I have no doubts as to the ultimate verdict.

Yours respectfully,

THOMAS W. POOLE, M.D.

LINDSAY, March 6th, 1882.

MEDICAL BATTERIES.

To the Editor of THE CANADA LANCET.

SIR,—I have read with much interest the series of articles on Electricity, by Dr. A. M. Rosebrugh, as they appeared in the LANCET, and in my opinion he has done the profession a lasting service in thus bringing before us this powerful, yet comparatively untried remedy, in such a plain and practical manner.

If Dr. Rosebrugh, with his well-known mechanical turn of mind, or some one else, could now give us a simple, reliable, and a conveniently portable battery, he would confer a great boon upon the profession. The ordinary batteries are so complicated in their construction, and so liable to get out of order, that they require a practical electrician to keep them in a state of efficiency. I would suggest that there is ample field for usefulness in the direction indicated, worthy of the attention of the best minds, who have the ability for devising such instruments.

Respectfully yours,

W. PHILP, M. D.

Hamilton, March 16, 1882.

MEMBRANOUS DYSMENORRHŒA—

℞ Chloral hydrate.
Potassi bromi.....aa. ʒii.
Morphiæ sulph .....gr. iss.
Syrupi aurantii corticis.....ʒiii.

M. Sig.—A dessertspoonful in a wineglassful of water every four hours while in pain.—*Dr. T. G. Thomas.*

Reports of Societies.

MICHIGAN STATE BOARD OF HEALTH.

(Reported for the CANADA LANCET.)

The regular quarterly meeting of this Board was held January 10th, 1882, in Lansing. The Secretary presented his quarterly report. The quarter had been a very busy one, owing to the numerous outbreaks of diphtheria, scarlet fever, and small-pox in the State, which had required much correspondence and the sending out of many documents. The compilation and issuing of the weekly bulletin of health in the State is now so systematized as not to take as much time as at first. It is published in probably 200 newspapers in Michigan. In response to a request, 57 health officers of villages have begun to make weekly reports of diseases. The Board re-affirmed the demand for these reports from health officers of cities. To each place in the State where diphtheria, scarlet fever, or small-pox was reported present, a letter was written to the health authorities giving full instructions and suggestions how to prevent the spread of the disease. Documents containing elaborate and particular directions have been sent for free distribution throughout the vicinity. Each officer was requested to make a special report on the epidemic under his care, and some of the reports show how, by determined action, to stamp out a contagious disease. The number of communications written during the quarter was 1,459. The number of diphtheria documents distributed was 29,000 ; of scarlet fever documents, 5,000 ; of general rules for restriction of contagious diseases, 6,000 ; reprints of weekly bulletins, 7,000. Papers showing the necessity for inspection and disinfection of immigrants, their clothing, baggage, etc., and especially for a system of surveillance to their destinations, a statement was made by the Secretary, of the introduction of typhus fever in Benzie County, by Norwegian immigrants. The disease made its appearance over 60 days after the arrival of the immigrants, and spread quite freely (not being reported at the time or treated as a contagious disease by the local authorities) causing many cases of illness, and at least three deaths. The importance of inspection of immigrants at Port Huron and of keeping those believed to be liable to spread communicable diseases under surveillance until their destination is reached, and then placing them in the watchful care of the local board of health was freely discussed. As this Board has no funds available for such a purpose, the subject was referred to the President, Secretary, and Dr. Lyster, to confer with the National Board of Health, and take such action as is possible.

A report by Hon. LeRoy Parker, relative to duties of health officers in verifying diagnosis of contagious diseases was read and ordered to be printed in the annual report. Mr. Parker reported the following : In Gaines Township, Genesee, Co., a child of Mr. B's. died of what a doctor called malarial fever, and did not report the case to the board of health, though it seems probable that it was really diphtheria. A neighbor and wife, Mr. and Mrs. B. assisted in preparing the corpse for burial. About the same time a child of Mr. S. died from "sore throat," not reported as "dangerous to the public health," and some of the children of Mr. B. attended the funeral. Soon after Mrs. B. was taken sick with diphtheria, and in turn 13 out of 14 members of the family had it, and 7 out of 10 children died. The board of health promptly isolated this household, but the attending physician's error in diagnosis, or failure to report the first case was fatal to the hopes of that family. In this connection the board adopted the following preamble and resolutions :—

Whereas, It is often difficult to recognize mild cases of diphtheria, or to distinguish such cases from a simple pharyngitis or laryngitis, and,

Whereas, such mild cases of diphtheria often communicate a dangerous and fatal form of diphtheria ;

Resolved, That it is the duty of physicians and householders in reporting diseases dangerous to the public health, and of local health authorities in their efforts to restrict such diseases, in every case to give the public safety the benefit of the doubt ;

Resolved, That suspected cases of dangerous diseases should be reported and precautionary measures should be taken.

The Secretary presented a report of local boards of health, showing much good work done during the past season in the restriction of contagious diseases. He read letters showing the action of local boards of health with contagious diseases, one from J. R. Thomas, M.D., Health Officer of Bay City, relative to diphtheria ; one from W. G.

Elliott, M.D., Health Officer of Pontiac, relative to scarlet fever; and one from Foster Pratt, M.D., Health Officer of Kalamazoo, relative to small-pox. The Secretary also read a *résumé* of work of other State Boards of Health, and it showed that typhoid fever was very widely prevalent, that small-pox was very prevalent in the northern and north-western states, and that intermittent fever was present in Conn., Mass., and Rhode Island.

The next regular quarterly meeting of the Board will be held on the 11th of April. The Sanitary Convention was held at Ann Arbor on the 28th of February.

Selected Articles.

ABSCESS OF THE LIVER.

The following interesting clinic by Professor Whittaker, is taken from the *Lancet and Cli ic*, Cincinnati.

Dr. Kelly, the resident physician, who has had immediate charge of the case will read us the history of it:—Mrs. G., æt. 32, married for two years; has had one child, which died about five months ago, aged nine months. Family history good. Personal history, so far as patient knows, is also good. Indeed, judging from the history, the patient has enjoyed unusually good health. Parturition and puerperium were perfectly normal. The patient has not menstruated for nearly two years. After the death of her child, about five months ago, she began to lose flesh and strength. This has continued progressively until she is now bed-ridden. She has a slight cough and complains of shortness of breath. Even when quietly resting in bed, she must retain a semi-recumbent posture in order to breathe easily and freely. Her appetite is fair, her bowels regular. She is very much emaciated. The abdomen at the upper portion is abnormally distended, as also at the lower portion. Palpation shows the enlargement at the upper portion to depend upon a solid body in the epigastrium and left hypochondrium. The enlargement below depends upon an accumulation of serum. There is here decided fluctuation. Above there is found a solid body jutting out from the free border of the ribs on the left side, and downwards nearly to a level with the umbilicus. The epigastrium is filled by a smooth round body which is exquisitely tender to the touch. Percussion gives fixed dulness over the hepatic region, extending from a line above the nipple in the epigastric region downward. The dulness in the lower abdomen varies with the position of the patient. The heart and lungs are normal. Pulse 112; temperature 99.5°. Urine normal except in excess of urates.

I think it must be apparent to you all that we have to deal here with some disease of the liver, which is most pronounced in its left lobe. So far as the history of the case is concerned, we have little or nothing to guide us. The most searching inquiries of the resident physician give us no antecedent disease. Dr. Kelly has taken pains to discover, if possible, some previous malady, because he knows as you know that the liver is seldom the seat of primary malady. Although it is such a big organ and has such a multitude of functions to perform, disease seldoms begin in it And while this is true of its acute, it is much more remarkably true of its chronic affections. I appeal to the history of the degenerations, the syphilitic, the fatty, the amyloid, the malarial, common conditions attended with enlargement of the liver, and you will remember of all these affections that they show their first expressions, or their first causes elsewhere. Hence the extreme importance of a history in a disease, real or suspected, of the liver.

Now, the only possible prodrome in the history of this case is childbed, a perfectly physiological condition, but we fix upon it nevertheless as the only clue we have to explain the abnormal state of the liver. So far as the statements of the patient are concerned they mislead rather than lead us to a comprehension of her conditions. For this patient came to the house to-day with a statement that she had "water on the chest." But upon examination there was found nothing wrong with the lungs; nothing wrong with the heart. Upon further examination, however, there was found something wrong in the region of the liver. There was this protrusion in the epigastrium; a round smooth protrusion, indicating an enlargement of the left lobe of the liver. There has been in the history of this case some slight œdema of the feet, but that has disappeared. You might think from this much of the history that we had to deal with a case of amyloid degeneration. On this supposition, the first inquiry you would make would be for phthisis, because one-half of all the cases of amyloid degeneration, are due to phthisis. Then you would inquire for a bone disease, for necrosis of the bone is one of the most frequent causes of it. Next you would in-inquire for syphilis; none of which conditions have pre-existed here. Given a tumor of smooth outline over the liver, with œdema of legs and you might naturally suppose, I say, that you had amyloid disease but you would not accept such a view unless you could find the cause of it.

Well, I came to the bedside of this patient just before I came to you, rather prejudiced in the belief that I had to deal with a case of amyloid degeneration, probably from one of the causes mentioned, possibly from malarial cause, and possibly from no discoverable cause, as such cases

do unquestionably exist. But, it must be apparent to you upon very superficial examination that there is a decided protrusion of the epigastrium ; this is as you see a globular enlargement of the left lobe of the liver, and when I now put my hand upon the hepatic region, four, perhaps five, inches from the margin of the ribs, I find this hard mass, which I of course recognize to be the liver. It reaches down to two and a half inches above the umbilicus. As I trace around this tumor, I can distinguish a sulcus which divides the right lobe from the left. The left lobe reaches down to a line near midway between the ensiform cartilage and the umbilicus. The right lobe reaches over to the left to the parasternal line. The tumor has distinct edges, but it has a doughy feel. It causes pain to the patient when I make pressure upon it. Now, if we go down lower, in the abdominal cavity, you observe that the umbilicus is protruded ; that the hypogastrium is also raised. I find in the iliac regions also a doughy feel which is due to the accumulation of fluid; that is, I get a distinct fluctuation.

We have here now an enlargement of the liver with a previous history of œdema of the feet. There is with this also, a considerable degree of emaciation, best shown about the chest, where the ribs are prominent and the intercostal spaces are well marked. There is in addition to this a considerable elevation of the temperature, to about 101°; the pulse is also somewhat rapid, running 105 per minute. What, then, might this enlargement of the liver be? Well, I said I came to this case rather prejudiced in favor of amyloid degeneration. For while it is the rule that amyloid degeneration is preceded by a history of suppuration, yet we do have it occurring where there is no such history. As a rule we have a suppuration of three or four months duration. There is another fact which we know clinically, that amyloid degeneration does not affect any one organ, but several organs. The liver, spleen, kidneys and intestines are the organs of predilection. There is perhaps no affection which enlarges the liver to such a degree as amyloid change. But an amyloid liver, while it gives a doughy feel and decided resistance does not give tenderness on pressure. We ought also to find some evidence of amyloid change in the kidneys, but the urine is normal. Now we find that this woman has just a few months ago gone through with puerperium. Could there have been any suppuration during that period? There is no evidence of it, so far as we can see. Since then we have no history of suppuration in this case, and no manifestation of its change elsewhere, we are forced to exclude amyloid degeneration. It could not be a fatty degeneration, for this is a disease which comes on in high-livers or after suppuration, especially in the lungs. It is rare to cut into the liver of one who has died of phthisis without finding evidence of fatty change. But a fatty liver is not tender to the touch. It is in no way attended with manifestations of febrile excitement. Moreover there is no history of phthisis here, for the organs of the chest have been pronounced normal. No one would for a moment think that this patient has cancer of the liver. Here is a patient who was perfectly well before parturition, was confined, nursed her child and got up perfectly well and remained so for several months before this affection of the liver came on. And, moreover, a carcinoma of the liver does not enlarge it uniformly, but there are nodules giving it an irregular outline. We should have also a discoloration of the surface. Then the patient is too young to be subject to this disease. Cancer of the liver, too, is nearly always a secondary product, but there have been no primary manifestations here. Of course, we exclude echinococcus. There could be no echinococcus here for we would then feel large, irregular, nodular masses, in which we might detect fluctuation. Specific disease we exclude because it is not, as a rule, attended with any enlargement of the organ, but, on the contrary, usually with contraction. Could it be cirrhosis? You know this disease enlarges the liver in its first stages. But cirrhosis comes on, as a rule, from alcoholism, and there has been no such history in this case. Sometimes there is no history of alcoholism. Could this then be one of those rare cases in which cirrhosis comes on after the puerperal bed? It has come on too rapidly for such a view. There has been no bile in the urine —no excess of urates ; the urine is perfectly clear.

Well, now, it seems to me that we have examined nearly all the diseases of the liver except *abscess*. We have come to this conclusion by exclusion, and we will come to it, also, by direct examination. We have the enlargement, the elevation of temperature, and, what we may lay especial stress upon, the tenderness. But how shall we verify it to be an abscess? The abscess is usually found in the right lobe of the liver; but here the main amount of tumefaction is in the left lobe. It does not enlarge the liver in all its dimensions. It usually works some way to the surface. We know that an abscess of the liver sometimes discharges itself into the pleural cavity, and occasionally into the peritoneal sac, or upon the surface. Now, how can we make the diagnosis absolutely certain without the presence of pus? By aspiration. Well, I took the precaution just before I came in to insert my hypodermic needle, and I drew out this syringeful of the yellowish fluid you see. No other evidence could give us proof like that. In old times it used to be a difficult thing to diagnosticate an abscess of the liver. Now, when in doubt, we introduce the needle of the hypodermic syringe carried with us. No language could portray so distinctly what is the matter with this

patient as that spoken by this little instrument. It takes but five seconds to let it speak. By this means we could have recognized an accumulation of fluid of any kind: blood, serum, echinococcus fluid; and, having our diagnosis, know the treatment at once. Chapters upon chapters, written about the diagnosis of abscess of the liver we skip altogether, because the diagnosis is so easy by means of aspiration.

Now we know what is the matter in this case absolutely, and we know just what to do for it. And I would do it here before you but the patient objects. That objection may prove fatal to the patient. The abscess may break into the peritoneal cavity and set up a fatal inflammation before morning. Now pus, wherever it is located must be evacuated—*ubi pus, ibi incisio*—wherever there is pus there must be an incision. The pus must, of course, be discharged. If let alone it will burst either into the pleural cavity, the peritoneal cavity, the bronchii, the pericardium, or upon the surface. If it burst in the lungs or upon the surface, the patient may come through all right; but if the adhesive inflammation between the liver and the abdominal walls be not sufficient, and there exists a mere crevice between the liver and the walls, the pus will take that course, and kill the patient with peritonitis. In old times they cut down upon these abcesses—that is, they burned down through the abdominal wall so as to cause an adhesive inflammation, then cut through. Now, however, we aspirate it, and draw off the fluid almost without causing pain. Well, the cavity may fill up again. Suppose it does; we will then wash it out frequently, and, if necessary, inject some irritating material to prevent the reformation of the pus. I use the compound solution of iodine. There is not much color to this fluid, and it looks as if the cavity was filled with clear and laudable pus. This makes it all the more favorable for the patient, though the sac will fill again. The abscess is no doubt surrounded by a thick wall of pyogenic membrane without anfractuosities.

Now, suppose we had not found the depot of pus; still there would be no harm done. The little operation causes no more pain than a hypodermic injection. I introduced this needle before I came in without the patient feeling it at all. But because you did not find the pus you could not be sure there was no abscess. I once aspirated a man in this amphitheatre five times and failed to get any pus. The man died, and upon *post mortem* examination, I found that the needle of the aspirator had once gone into the pyogenic membrane within a line of the pus cavity. As a rule, you will hit it; but you will, as a rule, if you aspirate five times and get no pus, be correct in your conclusion that there is no abscess. You also see how little time there is to waste in a case of this kind, and how important it is to make a diagnosis; and yet how often this is not done. I have seen a patient with a pleurisy, who was treated months for other diseases, where you could recognize an accumulation of fluid in the chest cavity by simply putting your hand on the chest; and noticing the absence of all fremitus, I put in the hypodermic needle, drew it out full of fluid and made a diagnosis in ten seconds; so can any of you. I have, I suppose, aspirated five abscesses of the liver in this amphitheatre. There is very little danger in aspiration, and yet I once met with an accident right here: A thrombus suddenly formed and the patient died on the table. That was not a case of abscess of the liver, however, but of the lungs. Our pathologist, Dr. Walker, tells me of two fatal cases he knows of where the pus trickled out from the wound of aspiration and produced a fatal peritonitis. Such an accident could only happen through the use of too large a tube. You can pump out thick matter through a very fine tube.

CARCINOMA OF THE BREAST.

By Dr. S. W. Gross, Philadelphia. (New York Academy of Medicine, Jan. 19th, 1882. *Medical Record* report).

The conviction is steadily gaining ground that carcinoma of the breast is curable, and that it is primarily a local affection and not an expression of constitutional taint, discrasia or diathesis.

In favor of these views are Virchow, Billroth, Fischer, Esmarch, Nussbaum, Volkmann, Kocher, Hutchinson, Gull and others in Europe; and Parker, Gross, Peters and others in this country.

In connection with this subject three important questions arise:

1. Does the knife prevent local dissemination of the disease?

2. Does the knife prevent lymphatic involvement?

3. Does the knife prevent the development of metastatic tumors?

First. Does surgical intervention prevent invasion of adjacent tissues? This question must be answered in the affirmative in a certain proportion of cases. The conclusion of the reader was that extirpation precludes extension to the skin and surrounding parts in *ten* per cent. of all cases.

Second. Does surgical interference with the knife prevent involvement of lymphatic glands? It certainly does.

Third. In attempting to answer this question—Does the knife prevent the development of metastatic tumors—it must be borne in mind that such tumors are not always developed.

After analyzing several collections of cases, Dr. Gross reached the conclusion that operation prevented implication of internal organs in 32.30 out of every 100 cases.

Again, life may be prolonged and permanent cure may be effected by surgical intervention. Extirpation adds one year to life. Special attention was directed to Volkmann's statement that the result might be regarded as final if the patient survives over *three* years after the *last* operation. The author of the paper then presented an analysis of 524 cases, in which 1 in 9.19 fulfilled these requirements. Subjecting the 524 cases to Paget's severe test—that the patient should live more than ten years from the beginning of the disease, or that the disease should be stationary—he found that 1 in 5.7 fulfilled these requirements. The average duration after operation in all these cases, was from seven to ten months. An analysis of 57 cases cured was then given, and the conclusion reached that recurrent tumors should be freely extirpated as soon as they appear.

The absence of glandular implication does not afford absolute guaranty that secondary deposits are not in the viscera.

Dr. Gross makes it a rule to amputate the entire mamma, search for any outlying nodules, dissect away the fascia overlying the pectoral muscle, open the axilla, and remove any glands which have escaped observation previous to interference. Heretofore, one cure out of every nine and one-fifth cases has been the most expected from early radical measures; but there was reason to believe that the ratio of cure would be increased. Partial operations should be *discarded*, for they are more fatal than removal of the entire breast, and they hold out but little prospect of permanent recovery. He believed that in the future the mortality from radical procedures would not reach ten per cent.

The conclusions reached by the author of the paper were substantially as follows:

1. That surgical intervention in carcinoma of the breast tends to retard the progress of the disease by preventing local dissemination, implication of associated lymphatic glands, and the development of visceral tumors.

2. That local reproductions do not militate against permanent recovery, provided they are thoroughly and early excised as soon as they appear, and that lymphatic involvement does not forbid operation, since, in fact, glands were removed in more than one-third of the examples of final cure.

3. That the subjects are, almost without exception, saved from local and general reproduction, if *three* years have elapsed after the last operation.

4. That the risk from operations is outweighed by benefits which accrue from them, since they not only add twelve months to the life of the patient, but also cure one-half as many patients as they destroy.

5. That all carcinomas of the breast—if there is no evidence of metastatic tumors, and if thorough removal is practicable—should be dealt with as early as possible by amputating the entire mamma, integument and all, dissecting away all the subjacent fascia, opening the axilla, with the view to exploration and removal of all the glands not palpable prior to interference.

An interesting discussion followed. Dr. Gross, in closing the discussion, said that the 17.87 per cent. of the mortality from the immediate effects of interference, was accounted for, to a certain extent, by the mode in which the axillary wound was treated. Instead of veins being ligated, the wound was stuffed with material which caused the secretions to be pent up, and pyæmia and septicæmia, and other bad accidents, followed. The operations which were followed by such a rate of mortality were not performed in English and American hospitals, but for the most part in Germany, where the mortality had been notoriously high.

He had removed the breast in seventy-two cases; seventeen by the thorough operation, fifty-five by the common operation, and he had lost only two patients, or less than 1.5 per cent. At most, the mortality should not reach five per cent. He thought that surgeons should expect better results than preventing the extension of the disease in 10.87 per cent. of all cases of cancer of the breast; that was the limit obtained by *all kinds* of operations. But he had presented the more thorough procedure, believing that if it was more uniformly practiced, better results than those already given could be obtained.

Recurrence of carcinoma after the ordinary operation was the rule, and generally in the line of the cicatrix. It was his point, and he regarded it as the most important. Why do we leave anything in which the disease may recur? To rid a field of large weeds, and leave the little ones standing, did not cleanse it; the farmer must remove the small weeds as well as the large, if he would not have his crops destroyed. The thorough operation was not especially serious. He had lost only one patient out of the seventeen upon whom he had performed it, and in that case the patient was a bad subject, enormously fat, and she died on the *third* day, from causes unknown. The disease recurs in the skin—if not in the skin, in the subcutaneous connective tissue and fat. Hence, why leave these tissues behind? His method of procedure is as follows: First, palpate the entire mammary region; feel for lobules outside of the gland in the axilla, above and below the clavicle, and then, instead of making an elliptical incision, embracing the nipple and a small portion of skin, remove the breast by a circular incision, remove the pectoral fascia, then secure blood-vessels, then prolong the incision into the axilla, which is to be explored with the finger, thoroughly, and all glands in the least affected removed; ligate with catgut each vein which goes into the axillary veins and all the arteries; make a clean and complete dissection of the axilla, and

then, after all hemorrhage has been staunched with hot water, a drainage-tube is inserted, and the lips of the wound approximated as closely as possible by stitches, introduced one and one-half or two inches from the edges, and the remaining space left to heal by granulation. In some cases it will be possible to approximate the edges of the wound accurately. He believed that carcinoma is, primarily, a local disease, and the sooner such an operation, for its radical removal, was performed, the better.

ON TAPPING THE BLADDER THROUGH THE PROSTATE.

BY REGINALD HARRISON, F.R.C.S., LIVERPOOL.

Tapping the bladder is an operation which is not often necessary ; I believe it may occasionally be resorted to even when a catheter can be passed. Assuming it to be required, how is it to be done?

Tapping with the aspirator-needle above the pubes is a safe proceeding, and for affording temporary relief is to be recommended. A surgeon who finds himself in difficulties with a distended bladder, a large prostate, and false passages, is likely to do less harm with the needle than with the catheter, and is sure to give relief. Taking off the tension by with-drawing the urine generally permits the instrument to pass on the next trial. This method, however, can only be used for temporary purposes.

Tapping the bladder above the pubes with a trocar for the purpose of establishing a more or less permanent drain is very much like opening an abscess at its least dependent spot. Urine ascends the canula against gravity, and the products of inflammation of the bladder, usually present in some degree, remain behind in the pouch undischarged. Tapping through the rectum requires the retention of the canula in the intestine, and is thus an obstacle to defecation. Forcing the end of the catheter through the enlarged prostate is an unsurgical proceeding not to be entertained. Tapping the membranous urethra leaves us in the position of having the obstructing prostate behind the opening. There is a point in the wall of the bladder unconnected with peritoneum through which a trocar and canula may safely be passed. I refer to the prostate gland, which in old men, where paracentesis is more frequently required, often affords a considerable area for the operation. I will illustrate this method by the following case, only premising that over twelve months ago I recognized its propriety, and tested it on the dead subject. I then had the instrument made for the purpose ; but though having considerable opportunity for dealing with retention of urine under all circumstances it was not till quite recently that a case in point presented itself. I mention this as explaining how I came to be prepared instrumentally for doing that which I will briefly describe :

N. D., aged eighty-four, was admitted to the Liverpool Royal Infirmary at 2 a. m. on 4th of November, 1881. My house-surgeon, Mr. Laimbeer, found him bleeding from attempted catheterism with a large prostate, and a distended bladder. Recognizing the urgency of the case, and finding catheterism impracticable, he emptied the bladder with the aspirator above the pubes. I saw the patient a few hours afterward, and found that he had not passed urine since, and that no catheter could be introduced. His tongue was brown, and he much exhausted. Later on I again visited him, when the bladder had become fully distended. I then had him placed under ether, and succeeded in passing a gum-elastic prostatic catheter. Beyond demonstrating that the difficulty had been overcome I declined letting any more urine be drawn off for a reason arising out of recognizing that either the catheter must be retained or re-introduced when required ; neither of which proceedings I was disposed to recommend.

Retaining a catheter in the bladder of an old man somewhat childish, and disposed to remove any appliance if not closely watched, is not easy, and when it is done it often ends with death from cystitis, pyelitis, and exhaustion. This was a case where, in my judgment, it was wisest to establish a permanent drain ; and to do this in the manner on which I had determined required a tense and not a flaccid bladder. Taking a trocar which had been made for the purpose, with a silver canula I introduced it in the median line of the perineum, three quarters of an inch in front of the anus, and pushed it steadily through the prostate into the bladder, at the same time retaining my left index finger in the rectum for a guide. On withdrawing the trocar a large quantity of ammoniacal urine escaped. The canula, being provided with a shield, was secured in its place by tapes much in the same way as a tracheotomy-tube. A piece of india-rubber tubing was attached to the portion of canula which projected beyond the shield, and conveyed the urine into a vessel placed at the side of the bed. The urine continued to dribble through this tubing. The patient was at once made comfortable by this arrangement, and in forty-eight hours he was up, sitting in an easy-chair—an important matter with old persons. To permit of this the rubber tubing is shortened during the day-time, the end of it being tucked through a light abdominal belt, where it is compressed by a small pair of bulldog forceps, which are removed when the patient desires to pass urine. He is quite as well as most men of eighty-four years of age are. He gets up daily, takes his food, and sleeps comfortably, either on his back or his side, without any narcotic, and is quite free from any urinary inconvenience other than wearing his tube. During

the night his sleep is not broken by calls to micturate or pass catheters, as his urine runs off by the tubing as it is excreted; while in the day-time when he is up and about his act of micturition practically resolves itself into something equivalent to the turning of a tap. His urine, which had been fetid and ammoniacal, is now nearly normal, the bladder being readily washed out by applying a syringe to the canula twice a day. On two or three occasions the canula has accidentally slipped out while the tapes were being changed, but has been readily replaced by the nurse. The somewhat enthusiastic manner in which the patient compares his present with his past condition can not be passed by entirely unnoticed.

The operation was devised much on the same lines I endeavor to take in commencing my lithotomy incision—namely, the selecting of a point in the perineum which endangers no vessel of importance. My object in planning the operation was to obtain what I can best describe as a short low-level urethra, adapted to the altered relations of the bladder to the prostate when the latter becomes enlarged, for the purpose of securing the most complete drainage. I should add that since the tapping, as far as we are aware, the patient has only passed a few drops of urine by the urethra. —*British Medical Journal.*

Sponge Grafting.—In the *Edinburgh Medical Journal*, fo. November, Mr. D. J. Hamilton, Pathologist to the Edinburgh Royal Infirmary, has a long and very interesting article on what he has named "Sponge-grafting." By means of a piece of antiseptic sponge he has been able to fill up cavities with granulating tissue, and to cause large ulcers to heal, which would not fill up or heal over by any other method. The first experiment related is the one made upon a sloughing ulcer of the leg, which was circular in shape, five inches in diameter, and from one-half to three-quarters of an inch in depth. The question of amputation had been raised. On August 3rd, however, the wound was filled with one large piece and several smaller pieces of antiseptically prepared sponge. The sponge fitted the wound accurately, and was inserted under the undermined edges. The dressing consisted of green, protective, carbolized lint, and dry boracic lint and bandage. By August 8th, the wound appeared to have shrunk a little, and the thin edge of the sponge felt firm, as if filling up with some substance, and if the surface was pricked it bled freely. The edges of the sponge appeared to be dissolving. On November 29th there was only a small portion to be seen on the surface. As soon as the sponge became vascular, epithelium spread rapidly over it. Mr. Hamilton says: "This experiment showed me that if sponge be placed over a granulatory surface, its interstices will, in course of time, become filled with blood-vessels and cicatricial tissue, just as in the case of a blood-clot, and, ultimately that the whole of the sponge will disappear in the wound, leaving an organized mass of new tissue in its place. It further showed that even when the wound continues in a putrescent condition, organization will still go on. In the case of the blood-clot, putrefaction tends to destroy it; in that of the sponge, its texture being more resistant, it does not seem to make much difference." Several other experiments are given, showing the adaptability of sponge for filling up a vacuity such as that which is left after the removal of a tumor. The article then closes with some suggestions as to the applications of sponge-grafting:

"Having once recognized the principle that a porous body may become vascularized, and be the medium for the construction of new tissue, the application of the method to various purposes naturally suggests itself. In applying any porous body with a view to this organization, certain points must always be kept in mind. The porosity of the body must be such that all the canals freely communicate. Sponge is exquisitively suited for the purpose on account of the free anastomosis between its channels, but many other substances might be utilized in the same way. I have of late thought that charcoal or calcined bone might be employed in certain cases. For one purpose, at least, such a solid framework would be useful. Where it is desired to prevent contraction of the newly formed tissue when it cicatrizes, where it is of moment to retain the newly formed tissue of its original bulk, then a solid framework must be employed. A solid framework will, I feel sure, organize just as a sponge would, and will have the special quality of preventing cicatricial shrivelling. When once incorporated with the tissue it will not cause any more irritation than the calcareous matter of a bone does. A dead body of this kind is not of itself an irritant. It is the injurious application of it, or the septic matter which it may introduce, which gives rise to the mischief. Such a solid framework, it strikes me, would be particularly useful for forming new bone. One of the great dangers of a simple periosteal detachment operation, is that the future bone is not sufficiently bulky and strong. By supplying a solid framework of this kind we would avoid this, and the formation of bone would proceed within it just as well as in the spaces of cartilage or the meshes of a fibrous tissue."

Mr. Hamilton stated some years ago that granulations are not formed of new vessels, but that on account of the removal of the skin the superficial capillaries are, by the propelling action of the heart, thrown upwards. If there is a blood-clot in the wound, it acts as a mechanical support for these capillaries, which are pushed into it from all sides. Believing, then, that the blood-clot was acting

mechanically, he determined to substitute some dead, porous, animal material, and accidentally hit upon sponge. This he has found to act admirably Thus, another important advance has been made in the dressing of wounds, and we expect that it will be found to be very generally applicable, especially when there is a cavity to be filled, or when it is important to prevent contraction from cicatrization.—*Western Lancet.*

FRENCH TREATMENT OF ITCH.—At present itch is cured in one hour and a half (at St. Louis Hospital). The first half-hour, the patient, absolutely nude, rubs himself from head, or rather neck, to foot, with soft soap. The second half-hour he is put into a tepid bath, where he continues the soft soap frictions. The third half-hour he rubs his body with Helmerich's sulpho-alkaline ointment. He puts on his clothes without washing off the ointment, so as to keep it in contact with the surface for twenty-four hours. While the patient is treating himself, his clothes are purified in a specially constructed stove at a temperature of 120°, and exposed to sulphur vapour. Four thousand itch patients are treated here (St. Louis) annually. The hospital treatment is a rough one and sometimes causes attacks of eczema. It may be mitigated thus: toilet soap is substituted for soft soap, and Hardy's modification of Helmerich's ointment used—lard 100 parts; sulphur 16 parts; bicarbonate of potash 8 parts, by weight. The patient should have his sheets and all under-linen changed immediately.—*Medical Times, from Gaz. de Hopit.*

THE OPERATIVE FIXATION OF FLOATING KIDNEYS.—Considering that the extirpation of the kidney is itself a serious operation, and that, moreover, by the removal of one kidney an increased function is thrown on the other possibly defective kidney, surgeons will welcome the new method recommended by Hahn (*Centralb für Chir*, 1881, No. 29). He has already practised it in two cases of floating kidney, the right in both cases), completely relieving all symptoms in one case, and greatly alleviating the other, where the left kidney was also slightly movable. The patient lying on his left side, a vertical incision is made along the outer edge of the erector spinæ from the twelfth rib to the crest of the ilium, dividing the latissimus dorsi and quadratus lumborum muscles. The kidney, in its fatty capsule, is then pressed from the abdominal side into the wound, and there fixed with six or eight catgut sutures. Both cases recovered without a bad symptom. Since, in both cases, the kidney became after a time again slightly movable, the operator recommends that the fatty capsule should be opened, separated from the kidney, and firmly sutured into the wound, while, also, the kidney should be fixed as low down as it can possibly be drawn.—*London Medical Record*, February, 1882.

THE DOCTOR HIS OWN PHOTOGRAPHER.—The *Medical News* (Philadelphia) calls attention to a recent invention by means of which photographs may be made by the medical man. "Medical men very frequently want photographs in cases of injury, deformity, tumors, etc., but the trouble and expense have been serious bars to obtaining them; and many patients, too, cannot go to the photographer. Drawings are often even more expensive, and labour under the disadvantage of possible inexactness. Recently, however, the introduction of the 'dry plate' process has so simplified the method, avoided the former dangers, and reduced the expense, that any one of ordinary intelligence and means can now take all the photographs he wants at a moment's notice. At the Cincinnati meeting of the American Association for the Advancement of Science, last August, Mr. Walker, of Rochester, N.Y., showed a 'pocket camera,' which, according to Prof. Lattimore, supplies every want of the inexperienced amateur. Its weight is only two pounds. 'Dry-plate outfits' are now to be had at a cost of $10 and upward, which are excellent. Provided with one of these instruments, the doctor would always be prepared to photograph any case he desires, at his office or in the sick room. Our hospitals, especially, should be provided with such an outfit, so that cases and specimens could be photographed at any time, even by a resident. Our microscopists would also find it exceedingly useful to make permanent many a transient preparation not suitable for preservation."

CATHETERISM OF THE TRACHEA IN CROUP.—A correspondent writes (*British Medical Journal*), that he was called to a girl 2½ years old, for croup. It was evident by the pulse, which was about 150, and almost imperceptible, that unless some relief could be given, the end was not far off. The face gradually became pale, and wore a distressed expression, and the lips were of a livid blue color. As the mother objected to tracheotomy, and as emetics, hot baths, and the ordinary routine treatment, had been previously tried, I introduced a large (No. 12) gum-elastic catheter into the trachea, with less difficulty than I anticipated—having first gagged the child's mouth with a cork, for the want of something better, and depressed the tongue with a spoon. After a severe paroxysm, she succeeded in getting a pretty good breath, and the next expiration was followed by the ejection of muco-purulent *débris* and sticky phlegm through the tube. In about ten minutes these convulsive efforts ceased—the child, in the meantime, getting a good amount of air into her lungs. In half an hour her face was flushed, but had lost its lividity, and the breathing was fairly comfortable. The tube was retained by tape tied round the child's neck, and was removed twenty-four hours after its insertion, when the temperature had fallen to 100°

Fahr. and the pulse to 110. Five days later she was running about the house, not much the worse for her dangerous illness. I observed hardly any difficulty in swallowing liquids after the first two or three attempts, when the tube had been introduced.—*Med. and Surg. Reporter.*

Iodoform in the Treatment of Diseases of the Skin.—Mr. Fraser has obtained very favorable results from the use of iodoform in various diseases of the skin. It may be readily employed in the form of an ointment of any required strength, mixed either with lard or vaseline. The strength of the ointment made use of has ranged usually from ten to thirty grains of iodoform to the ounce of cerate, but double this quantity can be applied. It has proved a most useful remedy in healing local eczematous eruptions occurring in strumous children and young people, as well as in cases of impetigo. Mr. Frazer also directs attention to the properties it possesses in curing porrigo decalvans. The best results he has as yet attained have followed the application of vesicating collodion over the affected spot and for a short distance around it. Previous to this it is well to epilate all diseased hairs over the spot, and when the blister is healing the ointment of iodoform should be applied night and morning, or oftener; by this treatment the hair soon reappears in a healthy condition.—*British Medical Journal.*

Galvano-Puncture in Aortic Aneurism.—Mr. Richard Cannon reports the case of an aortic aneurism which had almost reached the point of rupture, the skin being reddened and very thin over the tumor, which was cured by the insertion of two needles connected with twelve Stohrer cells. It is stated that when the needles were withdrawn no current was to be detected, so the favorable results may with equal probability be attributed to the mere presence of the needles or to the electrolytic action. The needles remained in the tumor only twenty minutes; at the end of ten days the tumor, which had only been the size of a walnut, flattened down to the chest walls, pulsation and redness had disappeared, and there was no pain or cough. Iodide of potassium was administered internally throughout the treatment.—*Lancet.*

Solidified Wine and Brandy.—An Italian has invented a process for solidifying wine. From a small quantity of this extract may be obtained a bottle of generous wine of good taste and beautiful colour. The object is to victual ships and supply armies. A French chemist has found a chemical combination by which he can solidify and even crystallize brandy. The brandy in its new form looks like alum. It entirely loses its smell. The facility with which it can be transported is the main recommendation of the new invention.—*Medical News.*

Nothing is worse than a vacillating physician whom each notion, each wish of the patient, each suggestion of nurse or family affects. Blown hither and thither by every breath, incapable of taking a broad view of the case, his treatment soon becomes as irresolute as himself, and directions and bottles accumulate with bewildering rapidity. The fewer drugs that are used the better; the greater the decision with which drugs are used the better.—*Da Costa.*

Hysteria.—When called to treat a young girl with a hysterical attack, there are three things which you had better do: (1) Institute at once firm pressure in the neighborhood of both ovaries. This is very apt to quiet the patient at once. (2) Administer an emetic. I have found that a woman who is well under the action of an emetic has not the opportunity to do any thing else than be thoroughly nauseated. Give a full dose of ipecac with one grain of tartar emetic. (3) And this method of controlling the spasm will often act charmingly, take a good-sized lump of ice and press it right down on the nape of the neck. This produces quiet by its powerful impression upon the whole nervous system.—*Dr. Wm. Goodell, in Clinical News.*

Earache.—In the course of practice, you will often be called upon to attend a case of earache. This means, pathologically speaking, acute inflamation of the membrane tympani. Now, in such a case, you may quickly subdue the inflamation, relieve the patient from the excruciating pain he is suffering, and save him, perhaps, from subsequent confirmed deafness. The treatment from which such a desirable result may be obtained is similar to that which you will find so beneficial in analagous cases of eye disease, viz., leeches behind the ear, hydrag c. creta and belladonna powders, with warm fomentations.—*Prof. Wharton Jones, in London Lancet.*

Treatment of Chronic Eczema.—Avoid the use of soap as this is irritating. Twice a day bathe the part in an aqueous solution of borax, one ounce to the pint. Dry without friction and freely apply the benzoated zinc ointment, then bandage the part firmly with old dry muslin which has been previously wet with a saturated aqueous solution of borax. Over this apply a bandage of oiled silk in such a manner as to exclude the air perfectly. Let the bowels be kept regular. In the majority of cases eczema can be promptly cured by the simple exclusion of air. Eczema of the fingers will generally yield in a few days if the air be excluded by the ordinary rubber cot.—*Chic. Med. Rev.*

Obligatory Vaccination of infants has just been adopted by the Swiss Government.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. MCMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 16 Rue de la Grange Bateliere, Paris.

TORONTO, APRIL, 1882.

This Journal has the largest circulation of any Medical Journal Canada.

REPORT OF THE REGISTRAR-GENERAL OF ONTARIO.

The total number of births, marriages and deaths registered in Ontario in 1880 was 74,897—42,312 births, 12,783 marriages, and 19,802 deaths, being an increase of 3,395; or 4.7 per cent. over the registrations in 1879. It is estimated in an appended review or decennial report that in 1880 over 90 per cent. of the marriages were registered—6.8 per 1000 of population; fully 70 per cent. of the births—22.4 per 1,000 of population; and nearly 60 per cent. of the deaths—or 10.6 per 1,000 of population; so that it appears that the proportion of deaths registered per 1,000 has nearly doubled during the last ten years, and the actual number registered has more than doubled (9,182 in 1871, and 19,802 in 1880); the registration of births have increased from 50 per cent. to 70 per cent.; and the registration of marriages from 75 per cent. to over 90 per cent. of the numbers estimated. There were 108.5 males born to each 100 females. There were registered 671 illegitimate births, an increase of 147, or 28 per cent. over the previous year. There were 407 pairs of twins, and 6 births of triplets. Of the 12,783 men married, only 129 were under the age of 20 years, while 2,698 women entered the matrimonial state before arriving at that age. In one instance an octogenarian married a young wife just out of her teens.

In the death wave for the year there were the usual two high points and two low points. The most marked feature in the wave for the year was perhaps the low point at which it started we should say (not subsided), in January. Of the total deaths recorded in the year only 7.3 per cent. were registered in this month. In the four preceding years the average percentage for January was 8.5; and 8.3 per cent. was the lowest for any one of those years. The wave rose rapidly, however, through February (1880), and in March there were 618, or 42 per cent. more deaths than in January. This altitude, the highest in the year, extended into April, but in May the wave sank lower than in February, and in June fell to the lowest point in the year, being the second low point. In July it swelled up again, though not so high as in May; but in August and early in September it had nearly attained the May altitude, where it remained until the end of the year, with the exception of a slight downward curve in November. The peculiar features in the wave for the year were two: the first high point reached in March (from which the wave usually recedes a good deal in April) was maintained throughout April and did not fall until May; and the wave, having risen to its second high point in August, did not recede again during the year except slightly in November, there being an absence of the usual marked fall or low point after the summer high point. The returns show that in 1880, as in 1879, the mortality in March, and also in April, was very high, and that this was largely due to deaths from lung diseases, especially from inflammation of these organs.

In regard to the certified causes of deaths no marked improvement in diagnosis is credited to the doctors, unless it be "concealed behind the fact" (whatever that means), that there were nearly 100 less deaths attributed to old age, while there was a larger number of deaths registered of persons who lived to reach the Psalmist's allotted period of 70 years, than in the previous year. Consumption, as usual, caused about one-ninth of all the deaths. Over 33 per cent. more deaths were registered as from pneumonia than in 1879; and over one-sixth of these occurred in March. Over 43 per cent. more deaths were recorded as from diphtheria in 1880 than in 1879; over 30 per cent. more from bronchitis, and over 50 per cent. more from congestion of the lungs, than in 1879. There was a very large increase in the number of deaths from scarlet fever and measles.

Appended to the Annual Report is a Review

the births, marriages and deaths registered in the Province since registration came into operation, especial attention being paid to the returns for the last ten years—1871 to 1880 inclusive. This will be found more interesting to lay readers than the usual annual reports, and is well calculated to create a more general interest in the subject of registration. Of all the deaths recorded during the ten years, 1870 to 1880, excluding 1875, for which no report was issued, 47.8 per cent. were of those under 20 years of age; 17.0 per cent. were of those between 20 and 40 years of age; 12.6 per cent. were between 40 and 60 years; 7.7 per cent. between 60 and 70 years; and the remainder, 15 per cent., were of persons more than 70 years of age. The deaths from zymotic diseases as a class, as compared with the total number of deaths from all causes, show a decided decrease in the ten years, though in some of the diseases of the class—in croup and diphtheria, for instance—there was an alarming increase; in cholera infantum there was a slight increase. "As the diseases of this class for the most part prevail at times epidemically, an increase, small or great, is at any time liable to take place from the breaking out and spread of an epidemic of any one or more of them. The decrease, therefore, during so short a period does not necessarily, by any means, show the commencement of a permanently improved condition of the public health, nor that such condition will follow." In tubercular diseases there was a slight decrease also. In diseases of the nervous system there was a marked decrease, owing to the subsidence of an epidemic of cerebro-spinal meningitis, which prevailed in 1872-73, and which has been placed in this class, "but which has the characteristics of a zymotic disease." In diseases of the respiratory organs, there was an increase in the proportion of deaths registered; and in diseases of the urinary organs there was a slight increase.

As to the special diseases, there was a slight increase in the proportion of deaths from consumption; a large increase from both heart disease and cancer—20 per cent. and 33 per cent. respectively, and a slight increase from inflammation of the lungs, liver disease, kidney disease and paralysis.

In phraseology, some portions of the report, and especially the annual report are unique. Besides showing many glaring inaccuracies, it tells us about a "heavy" death-rate and a "heavy" mortality, while any number of mortals were "attacked." There would seem to have been but few deaths and many, many "victims"; even "victims" of innocent old age and infantile debility. The 19,802 who died were doubtless a victimized lot; some of the "victims died." Bronchitis, croup and congestion of the lungs "usurped the places of dropsy, enteritis, diarrhœa and typhoid fever in the list of the ten highest causes of death." We are told some funny things, for example, that medical men have a deep and "unabiding" interest in the collection of vital statistics. Some sentences it would appear were not intended to be understood by ordinary mortals, some of "those things which no fellow can find out."

ONTARIO BOARD OF HEALTH.

The people of Ontario are to be congratulated upon the passing of an Act, during the recent session of the Legislature, establishing a "Provincial Board of Health." The measure was introduced by the Government, and carried through almost without amendment, the medical gentlemen on both sides of the House giving it their unqualified support. No one will question the utility and necessity of such a measure, and few can appreciate the value of it so highly as the members of the medical profession, who have ever shown themselves ready to further the interests of the public in the matter of sanitation In fact, this much-needed reform has been accomplished mainly through the active exertion of the medical profession in this Province, aided by the influence of the medical press. We look upon the advent of the present measure as merely an instalment of what will ultimately become one of the most important enactments on the statute book. There is much scope for improvement and a wide field for cultivation in the important subject of public health, and the enthusiastic sanitarian will not rest until all that human skill can devise and human ingenuity invent for the prevention of the spread of disease, has been accomplished. It is much to be regretted that a larger sum had not been appropriated to this important object by the Government, but it is to be hoped that the small sum placed in the estimates will be supplemented from year to year, as the necessities of the Board may require.

The Board of Health is appointed by the Lieutenant-Governor in Council, and consists of seven members, including the Chairman and Secretary. Three are appointed for a period of two years, and the other three for a period of three years ; subsequent appointments to be for a period of three years, and any retiring member is eligible for reappointment. The chairman will receive a salary of four hundred dollars per annum, and the secretary one thousand. The services of the other members of the Board shall be honorary, and they shall be paid no per diem allowance or compensation except their travelling and other necessary expenses, when employed on the business of the Board. The meetings of the Board shall take place quarterly at Toronto, and at such other times and places as they may deem expedient. It is contemplated by the Act that the board shall keep at all times an adequate supply of vaccine matter, for the purpose of supplying at, cost price, legally qualified medical practitioners in the Province with such reasonable quantities as they may from time to time require. The Act also gives increased powers to local Boards of Health ; and clause 14 provides that when the small pox or any other disease dangerous to public health, shall break out in any municipality, the health officers or Local Boards of Health, in case the municipality shall not have provided the same, shall immediately provide a temporary hospital for the reception of the sick and infected at the cost of the municipality, and such hospital shall be subject to the regulations of the health officers or local Boards of Health. Provision is also made and power given to local Boards of Health, to use all necessary means to prevent the spread of contagious diseases, by isolation, disinfection, etc., etc., and lastly, clause 20 imposes a penalty upon householders or physicians who shall refuse or neglect to give notice of the existence of any disease dangerous to public health, when the same has become known to them.

The following is the *personnel* of the Board so far as announced : Dr. Oldright, (Chairman), Drs. Covernton, Cassidy, and J. J. Hall (Homœopathist,) of Toronto, Dr. Rae, of Oshawa, and Dr. Yeomans, of Mount Forest. The secretary has not yet been appointed. Although the selection of the chairman does not meet our approval, yet as the appointment has been made, we feel that that gentleman should have a fair trial. It is a position that requires a thoroughly practical man, possessed of good tact and judgment, and having the entire confidence of the medical profession. A mere theorist is well enough in his way, but is entirely out of place when put forward as the governing spirit of an undertaking that requires practical talent of the highest order to make it a success. We sincerely trust that the practical qualifications of the other members of the board, will more than offset the disadvantages which might otherwise accrue from having an unpractical man at the head of affairs.

A good deal of labor in connection with the organization of local boards and other matters connected with the operation of the Act will devolve upon the Secretary, and it is to be regretted that a larger salary had not been attached to the office, so as to enable him to devote his whole time to the work. It will be difficult, we apprehend, to obtain the service of a medical man actively engaged in practice, as the duties, if properly performed, will necessarily engage much of his time, and prevent him from supplementing his income by the serious inroads his enforced absence from the city, from time to time, will make upon his practice.

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ONTARIO BRANCH MEDICAL ASSOCIATION.

The first regular meeting of the North-Western Branch of the Ontario Medical Association was held in Palmerston on Wednesday, Feb. 15th. The following members were present : Drs. Clarke, Collinge and Stewart, of Palmerston ; Nichol, Philp, Dillabough, Burgess, and Dingman, of Listowel ; Allan and Cowen, of Harriston ; Yeomans, Ecroyd, and Jones, of Mount Forest ; McLaren, Baird, and McArton, of Paisley ; Holmes and Graham, of Brussels ; Martyn, of Kincardine ; Stalker, of Ripley ; Mackid, of Lucknow ; Clapp, of Mildmay ; Hodge, of Mitchell ; Gun of Durham ; Holstein, of Cedarville ; and Stewart, of Brucefield.

Communications were received from Drs. Henderson, of Arthur ; C. E. Barnhart, of Owen Sound ; Robertson, of Markdale ; Hyndman, of Exeter ; Sloan, of Blyth ; Gillies, of Teeswater ; McDonald, Bethune, and Tamblyn, of Wingham — regretting their inability to attend.

During the early part of the meeting the chair was occupied by Dr. Clarke, of Palmerston, and afterwards by Dr. Yeomans, of Mount Forest, the President.

Dr. Collinge, of Palmerston, read a very carefully prepared report of a case of gangrene which he had recently under observation. The patient was a married woman, aged 32, who, when she first came under Dr. Collinge's care, on the 29th of July, 1881, complained of a pain in the lumbar region, general weakness, and a discharge from the vagina. On examination there was found some abrasion around the os uteri, which, with the discharge, entirely disappeared in a week after the application of nitric acid. On the 4th of August she complained of numbness and loss of power in the left arm, followed in a few days by a similar condition of the right arm. She vomited frequently, became drowsy and semi-conscious. A blister to the nape of the neck was followed by the permanent disappearance of the cerebral symptoms. On the 17th of August she was suddenly seized with a violent pain in the right gluteal region, extending down the outside of the thigh. The right thigh and leg were found to be larger than the left. On the 24th of August the right great toe had a purplish hue and was painful. In a few days the color was changed to a white mottled appearance, and the gangrenous process had now involved the whole foot.

There was a line of hardness along the course of the right internal saphenous vein in the lower part of the thigh. The gangrene steadily progressed, until an oblique line of demarcation formed four inches above the ankle joint. Previous to her death, on the 28th of Sept., the gangrenous process had extended upwards to within four inches of the knee joint, and the soft tissues over the sacrum, to the extent of 5 x 3 inches, sloughed away. The great toe of the left foot was livid and painful.

The reading of this paper was followed by a discussion, in which Drs. Allan, Cowen, Burgess, Clarke, Clapp, and others took part.

Dr. Graham, of Brussels, read a paper on "Pernicious Anæmia." He gave the details of two cases which well illustrate the wonderful hæmatinic powers possessed by arsenic The first case was that of a married woman, aged 35, who was found in the following state five weeks after her confinement. There was little or no hæmorrhage during the labor. Face swollen and bloodless, mucous membranes pale; troubled frequently with diarrhœa and vomiting. Frequent pyrexial attacks. The blood was found to contain a large number of microcytes. The corpulsces presented various forms; no increase of white cells. Under quinine and iron she became rapidly worse; under arsenic she rapidly and permanently recovered. The second case is a somewhat similar one, occurring in a female aged 24, who, two weeks after confinement, presented the well-known symptoms, including the pyrexial attacks of pernicious anæmia. Arsenic was soon followed by recovery.

Dr. Stewart, of Brucefield, read a paper on "Some of the Uses of the Sphygmograph in Practical Medicine." Traces illustrative of the actions of alcohol, digitalis, nitro-glycerine, and other drugs, were shown. Traces were also shown which prove that in many cases of pneumonia, even during the first twenty-four hours, the tension of the radial artery is much lowered.

Drs. Yeomans, Burgess, Clapp and Mackid were appointed to read papers at the next meeting of the Association, which will be held in Palmerston two or three weeks after the meeting of the Ontario Medical Association.

THE RADICAL CURE OF CANCER.—Dr. Warren, of Boston, who, in October last, was delegated to receive competing essays on the subject of the radical cure of malignant disease, announces that three essays were presented. In the consideration of their merits the assistance of Dr. George B. Shattuck, editor of the *Boston Medical and Surgical Journal*, was invoked; and it has been decided that no essay is worthy of a prize.

The same subject, namely, *The Probability of the Discovery of a Cure of Malignant Disease, and the Line of Study or Experimentation likely to bring such a Cure to light*, is proposed for essays to be presented in competition not later than the first day of December, eighteen hundred and eighty-three (1883), to the above-named, who, with such assistance as he may select, will be the judge of their merits. For the best essay on the above subject a prize of one thousand dollars will be given, the right being reserved to withhold the prize in case no essay of sufficient merit be presented.

The essays must be legibly written in English, and neatly bound. Each one must bear a motto, and be accompanied by a sealed envelope bearing the same motto, and inclosing the name and address of the writer. They will all remain in the possession of the donor of the prize for the convenience of reference, and the privilege is claimed to publish the successful one, with the name of the writer. No writer, however, surrenders the privilege of retaining a copy of his essay, and publishing it. The decision concerning the merits of the essays will be made chiefly from a practical stand-point, it being the object of the donor of the prize to obtain suggestions by which a search for a cure for cancer may be instituted.

McGill College Convocation.—The following gentlemen received the degree of M.D.C.M. on the 31st ult.:—Chas. O. Brown, Lawrence, P.Q.; Benj. W. Burland, Port Kent, N.Y.; Lorne Campbell, Montreal; Angus M. Cattanach, Dalhousie Mills; O. Edmund Christie, Lachute, P.Q.; W. C. Cousins, Ottawa; Wm. J. Derby, North Plantagenet; W. T. Duncan, Granby; O. H. A. Dunlop, Pembroke, P.Q.; Rankin Dawson, B. A. (McGill), Montreal; Hugh Gale, Elora; James A. Grant, B.A. (Queen's), Ottawa; B. F. W. Hardman, Aylmer, P.Q.; R. F. Klock, Aylmer; R. K. C. McCookill, Montreal; A. R. McDonald, Trinity, Texas; F. N. McLean, Perth; W. J. Musgrove, West Winchester; Henry V. Ogden, B.A. (Trinity), St. Catharines; T. J. Pierce O'Brien, Worcester, Mass.; Henry O'Keefe, Lindsay; O. Clarendon Rutherford, M.A. (Union), Waddington, N.Y.; Alex. Shaw, Seaforth; E. W. Smith, A.B. (Yale), West Meriden, Conn.; W. E. Thompson, Harbour Grace, Nfld.; H. W. Thornton, B.A. (McGill), Montreal.

The Holmes gold medal for the best examination in primary and final branches was awarded to Robert J. B. Howard, B.A., Montreal. The prize for the best final examination was awarded to H. V. Ogden, B.A., of St. Catharines, Ont. The prize for the best primary examination was awarded to Geo. A. Graham, of Hamilton, Ont. The Sutherland gold medal was awarded to Wyatt G. Johnson, of Sherbrooke, P.Q. The Morris scholarship in physiology was awarded to Wyatt G. Johnson, of Sherbrooke, Que.

Professor's prizes—Botany, Edwin G. Wood, of Londesboro'; for the best collection of plants, W. W. Doherty, of Kingston, N.B.; practical anatomy, the demonstrator's prize was awarded to Geo. Carruthers, of Charlottetown, P.E.I., who was closely pressed by Chas. E. Gooding, of Barbadoes.

Royal College of Physicians and Surgeons, Kingston.—The following gentlemen have passed the final examination in this institution:—R. S. Anglin, Kingston; J. Denike, Belleville; A. Mondy, Almonte; H. N. Macdonald, Lake Ainslie, C.B.

The following have passed their primary examination:—C. Clancy, Wallaceburg; L. T. Davis, Kingston; G. H. McGhie, Elgin; D. C. Hickey, Kingston; R. Smith, North Williamsburg; and A. J. Grange, Napanee. Messrs. F. Kidd and W. J. Young have been appointed house surgeons, and W. G. Anglin and T. A. Moore, demonstrators of anatomy, for next year.

Death from a Mixture of Chloroform and Ether.—A death occurred recently in Lindsay from the inhalation of a mixture of chloroform and ether. The operation was for removal of the great toe for frost-bite. Drs. Burrows aud Coulter performed the operation, and, at the request of the patient, administered an anæsthetic, a mixture of chloroform and ether. An examination of the patient by the medical men showed no reason why the anæsthetic should not be given. The doctors affirm that at no time during the operation was the patient thoroughly under the effects of the mixture administered, as at the conclusion of the operation his breathing was natural and conditions favorable. Suddenly he gave a gasp or sigh and a moment after expired. The usual means to bring about resuscitation were tried without avail. There was no *post mortem*.

Presentation to Dr. Widdifield, M.P.P.—A very pleasing episode took place in the Local Legislature just before the prorogation of the House, in the presentation to Dr. Widdifield, M. P.P., by the members of the Legislature of a very elegant and costly service of silver in recognition of his services as Ministerial whip during the time he has been a member of the House. The testimonial consisted of seven pieces of silver, a tea-set and waiter handsomely chased. Upon the salver is beautifully engraved the following appropriate inscription:—

"Presented by the Reform members of the Legislature of Ontario to Dr. Widdifield, M.PP., in appreciation of his valuable services and uniform courtesy as Government Whip during the past six years, March 10th, 1882."

The speaker of the House (Col. Clarke) occupied the chair, and Mr. Badgerow, member for North York, formally made the presentation. Hon. S. C. Wood, Provincial Secretary, added a few words in which he spoke of the highly satisfactory manner in which the Dr. had performed his delicate and important duties. Dr. Widdifield made a suitable reply. We congratulate the Dr. upon the high esteem in which he is held by members of both sides of the House, and many warm friends outside the Legislature.

Compressed Hypodermic Tablets.—We have been shown the soluble compressed tablets of morphine, atropine, strychnine, etc., prepared by Wyeth & Co., of Philadelphia, for hypodermic use. They will be found very convenient to carry about, accurate in quantity, readily soluble, and a perfect means of preserving the drugs used. They are prepared in the same way as the compressed tablets of chlorate of potash. A small tablet is dissolved in a little water, and injected whenever required.

College of Physicians and Surgeons, Que. —The semi-annual meeting of the Board of Governors of the above-named College will be held in Montreal on the 10th of May next. Candidates for examination or the license must send their papers, accompanied with the fee, $20, at least ten days previous to the meeting, to either of the secretaries, Dr. A. G. Belleau, Quebec, or Dr. F. W. Campbell, Montreal. The preliminary, or matriculation examination for students will take place on the 4th of May. The fee, $10, should be sent to either of the secretaries, as above mentioned.

Application of Chrysophanic Acid—The use of the above valuable remedy for psoriasis and certain forms of skin disease is occasionally attended with inflammation of the skin, besides destroying the under clothing and bed-linen of the patient. Dr. Fox, of New York, *(Medical News)* recommends, in order to avoid these objectionable features, the following method of applying the remedy: A soft paste is made of chrysophanic acid and water, and smeared on the patches, the scales having been previously removed with soap and water. As soon as the paste dries it is to be coated over with collodion. This will remain for several days, when the application may be renewed.

Bromide of Ammonium in Whooping Cough. A writer out West (*Medical News*), who has had considerable experience in the treatment of this affection recommends bromide of ammonium, in doses of from one to four grains three or four times daily, according to the age of the child. He was led to use it from having seen it highly recommended by Dr. Kormann, and was much impressed with its influence over the disease. It is best administered in syrup, or in the form of an elixir.

A Liberal Donation.—Dr. James Boyle, a native of Amherstburg, Ont., who has been practising in New York city a number of years, and who lately returned to Amherstburg, has given to the proposed free library in that town his own library, worth $5,000, and has endowed the project with $5,000, the interest to be used in sustaining the library. He makes a further grant of $500 in cash towards the building fund. The library will be one of the best in the Province. We wish more of our wealthy citizens would follow the Dr.'s noble example.

Boracic Acid in Boils.—The Louisville *Medical News* states that boracic acid applied to boils before or after incision will promptly arrest their development. The efficacy of this remedy can be very readily tested by applying the solution freely after incision. We very much doubt its efficacy when applied before incision.

Ergotine for Night Sweats.—Da Costa considers ergotine the best remedy for night sweats of phthisis—two grains three or four times a day. It is less prompt than atropia, but it is free from any unpleasant after effects.

British Qualifications.—H. A. DeLom, M. D., Trinity College, was admitted Licentiate of the Royal College of Physicians, London, on the 23rd of February.

Removal.—Dr. Theo. S. Covernton, assistant physician to the Toronto Lunatic Asylum, has resigned his position and removed to Winnipeg. He has entered into partnership with Dr. Kittson, formerly of Hamilton, Ont.

TETANUS SUCCESSFULLY TREATED BY CHLORAL AND BROMIDE.—Dr. J. W. Salter (*The Practitioner*) reports a case of traumatic tetanus in a man 51 years of age, successfully treated with large doses of chloral and bromide, sometimes every half hour, but usually every two hours, — occasionally at longer intervals. The total amount given in the twenty days treatment was sixty drachms of chloral and eighty drachms of bromide, or three and four drachms per diem respectively.

SCALY ECZEMA.—Dr. Edward Sharp, of Salem, N.J. (*Med. Bulletin*), recommends the following combination : R. Adipis, ℔ j. ; lac. sulphuris ʒ iv. ; ung. hydr. ox. rub., ʒ x. ; ol. gaultheriæ, ʒ j. Mix the sulphur gradually with the red mercurial ointment, adding the lard from time to time, as the mixture requires dilution ; and when all the lard and mercurial ointment are thoroughly mixed with the sulphur, add and intermingle the oil of wintergreen.

NASO-ORAL RESPIRATOR.—Through the kindness of Mr. Mills, druggist of Brantford, we have received one of Dr. McKenzie's naso-oral respirators. The instrument is neatly made and well adapted for the inhalation of medicinal vapors, where such may be indicated in the treatment of disease. We intend giving it a trial upon the first favorable opportunity, and will report the result of our experience in its use.

FORMULA OF PUTTNER'S EMULSION. — Each tablespoonful of Puttner's Emulsion contains the following :

R. Ol. Morrhuæ Opt.....	70 per ct.	
Calcis Hypophos.....	grs.	iii.
Sodæ "	grs.	iii.
Pancreatine.....	grs.	i.
Tr. Ferri.....	grs.	ii.

APPOINTMENTS.—Drs. Barrett, I. H. Cameron, A. H. Wright, W. J. Wagner, and W. W. Ogden have been appointed to conduct the medical examinations for Victoria University for 1882 in Toronto.

Dr. McKeough, of Chatham, has been appointed examiner on surgery and botany in the University of Trinity College, and Dr. Baptie on chemistry.

Dr. Grasett, of Trinity Medical College, has been appointed examiner in surgery, and Dr. M. Aikins, of the Toronto School of Medicine, in anatomy, in Toronto University.

Dr. Joseph Pancoast, Emeritus Prof. of Anatomy in Jefferson Medical College, Philadelphia, died on the 7th ult., at the advanced age of 77 years.

Books and Pamphlets.

ESSENTIALS OF THE PRINCIPLES AND PRACTICE OF MEDICINE. A handbook for students and practitioners. By Henry Hartshorne, A.M., M.D., lately Professor of Hygiene in the University of Pennsylvania, etc. Fifth edition, thoroughly revised and improved, 12mo., pp. 669, with 144 illustrations. Cloth, $2.75. Philadelphia : H. C. Lea's Son & Co., 1881. Toronto : Hart & Co.

We cannot speak too highly of this brief epitome of medicine. It is a master-piece of condensation. The author gives by way of introduction, a succinct review of the history of medicine and the different systems. He then proceeds to the discussion of general pathology, semeiology, general therapeutics and nosology. The second part of the work treats on special pathology and practice. Many new additions have been made throughout the work, some new subjects written upon, and a new section is added upon eyesight, its examination and correction. We have much pleasure in recommending this handbook to medical students and practitioners.

NERVOUS DISEASES, THEIR DESCRIPTION AND TREATMENT. By Allan McLane Hamilton, M.D., Fellow New York Academy of Medicine, &c., second edition. Philadelphia: H. C. Lea's Son & Co. Toronto : Hart & Co.

This is an eminently useful work on the disease on which it treats. It is concise and practical, yet sufficiently comprehensive for general use. Many changes have been made, and much new matter added to the present edition. The chapter on diseases of the lateral column of the cord is entirely new. The work is well illustrated, and the plates are good. The illustrations are chiefly borrowed from Charcot, Gowers, Clarke, and others. The author gives a clinical history of a number of cases in illustration of the character of the different diseases under discussion, which will be found of interest to the student of nervous diseases. The various diseases are well described,

and the suggestions in regard to treatment very valuable. We have much pleasure in recommending the work as one that will form a useful guide in the diagnosis of treatment of nervous diseases.

A System of Surgery, Theoretical and Practical, in treatises, by various authors, edited by T. Holmes, M.A., Cantab. Lecturer on Surgery, at St. George's Hospital, London—First American from second English edition, Vol. III. Philadelphia: H. C. Lea's Sons. Toronto: Hart & Co.

The third and last volume of this interesting and valuable work on surgery, has just been received. The volume before us embraces diseases of the respiratory organs, diseases of the bones, joints, and muscles, diseases of the nervous system, gun-shot wounds, operative and minor surgery, and miscellaneous subjects. We have already expressed our very high appreciation of the value of this excellent work on surgery. It is the best and most exhaustive treatise on surgery yet published, and those who are devoting special attention to this subject cannot afford to be without it.

Students Manual of Venereal Diseases, by Berkeley Hill and Arthur Cooper.

Clinical Handbook of Diseases of Women, by W. Symington Brown, M.D.

Lectures on Electricity, by A. D. Rockwell, M.D.

Index of Surgery, by C. B. Keetly, F.R.C.S.

Sympathetic Diseases of the Eye, by Ludwig Mauthner, M.D.; translated by Warren Webster, M.D. New York: William Wood & Co. Toronto: Willing & Williamson.

We can heartily recommend the above epitomes, not only for students, but practitioners, who will find in these digests careful and judicious selections, valuable notes, and most important aids in cases in practice presenting difficulties or anomalies that would involve for their elucidation a long search through a great variety of treatises on the different subjects, thus economising time that frequently can be ill spared from the pressing duties of general practice.

A Treatise on Human Physiology. Designed for the use of Students of Medicine. By John C. Dalton, M.D., Professor of Physiology and Hygiene in the College of Physicians and Surgeons, New York, etc. Seventh edition, with two hundred and fifty-two illustrations. Philadelphia: Henry C. Lea's, Son & Co., 1882. Toronto: Hart & Co.

The new edition of this popular work on physiology, with which medical students are well acquainted, will be welcomed by all. Many changes have been made since the issue of the last edition. These are especially noticeable in the sections on Physiological Chemistry, and on the Nervous System. Notwithstanding the changes and additions the work has not been increased in size, but rather diminished. The work is in Lea's best style of art and handsomely bound.

Lectures on the Surgical Disorders of the Urinary Organs. By Reginald Harrison, F.R.C.S., Liverpool, Eng. Second edition. London: J. & A. Churchill. Toronto: Willing & Williamson.

The author of this valuable work has added much new matter to the present edition in the way of improvements in practice, and also by embracing the larger field of the surgery of the urinary organs. The first portion of the work is devoted to a full consideration of stricture of the urethra and its treatment, perineal fistulæ and their treatment, and foreign bodies in the urethra and bladder. He next deals with irritable bladder, hypertrophy of the prostate, and inflammation and atony of the bladder. Four chapters are devoted to a consideration of vesical calculus and its treatment, and the concluding chapters embrace injuries to the bladder, surgery of the kidney, tumors of the bladder and prostate, etc., etc. The work is a valuable accession to the literature of this important subject, and the author's opinions and practice are worthy of the fullest consideration.

Births, Marriages and Deaths.

In Toronto on the 3rd ult., the wife of Dr. Chas. O'Reilly, Medical Superintendent of the Toronto General Hospital of a son.

At Ripley, Ont., on the 20th of February, the wife of Dr. M. Stalker of a daughter.

In Kingston on the 11th ult., Dr. Horatio Yates, aged 61 years.

At Ancaster, Ont., on the 24th ult., Dr. H. Orton, aged 50 years.

At Blairton, Ont., on the 8th ult., Dr. McCay, aged 66 years.

THE CANADA LANCET,

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Original Communications.

CLINICAL NOTES OF THREE CASES OF "TUMOUR," WITH ILLUSTRATIONS.

BY D. MACLEAN, M.D., ANN ARBOR, MICH.

Professor of Surgery and Clinical Surgery in the University of Michigan.

CASE I.—J. H. S., æt. 57, of Milan, Mich. Patient came to the clinique June 4th, 1879, in the hope of having a tumour, which had long been a great burden to him, removed. He stated that the tumour first appeared twenty-two years previously *in the region of the groin*, and that it had gradually altered its position until it reached its present situation as shown in the accompanying cut. It will be seen that the tumour is attached by a broad base, and hangs over the left hip, the pedicle being nearly related to the crest of the ilium. Patient had no theory as to how or why the tumour had changed its position, but he was quite positive as to the fact of the change having occurred. The tumour measured twenty-eight and a half inches in circumference, and extended from the crest of the ilium to the middle of the thigh. It was not painful, but its weight caused serious inconvenience, to relieve which it was supported in a sac suspended from the opposite shoulder. During the last seven years the growth of the tumour had been much more rapid than formerly.

On examination, the tumor was found to be irregularly lobulated, solid, and very vascular. Enormous veins were visible on its superficial aspect.

Patient was extremely anxious for an operation, and as his health otherwise was good, and no contra-indication existed, I agreed to remove it.

Chloroform having been administered, I first transfixed the base or pedicle with a strong double ligature, in the hope of thereby controlling hæmorrhage. It at once appeared, however, that no material advantage could be gained in this way. I then tried to empty the tumour of its blood by Esmarch's bandage applied to the growth itself. This expedient proving equally futile, I took an amputating knife, and, all hands being on the alert for hæmorrhage, with one sweep I divided the pedicle completely. Notwithstanding the fact that the track of the knife was instantly covered by compressing sponges, one gush of blood occurred, sufficient to blanch the patient and give him a very cadaverous appearance.

All bleeding points were ligated by cautiously exposing the surface of the wound in small sections. The lips were then approximated by a few stitches, and water dressing applied.

The symptoms of shock were very decided but not alarming, and patient made a rapid recovery, and was dismissed, *cured*, June 14th, just ten days from the date of operation. Three years have now elapsed since this operation was performed, and it is satisfactory to be able to report that up to the present time the patient has enjoyed excellent health, and as yet no symptoms of return have appeared.

The structure of the tumour was fibrous, degenerating at some points into fatty. Its weight, im-

mediately after removal was thirty-three and one-half pounds.

CASE II.—J. C., æt. 44, of Jackson, Mich. Admitted to the University hospital January 23rd, 1882, on account of a tumour of the forehead. The situation and relative size of the growth is well shown in the accompanying woodcut, copied from a photograph from life.

History.—Patient states that eight years ago a small lump, about the size of a peanut, was noticed over the vertex. After a blow this little tumour became irritated and grew rapidly, until it attained the size of a peach. It was then excised by a surgeon in Jackson, but before the wound healed, the tumour reappeared at the anterior margin of wound, and grew rapidly. This was two years ago. One year ago a second operation was performed by another surgeon in Jackson, but with no better result. By this time the tumour had developed in a direction towards the forehead, leaving the original site entirely free from disease.

On examination, the tumour was found to be firmly attached on its deep aspect. The superficial surface was ulcerated, and poured forth a pretty profuse discharge, composed apparently of water, pus and blood. The skin over the growth was disorganized and could not be utilized to close the gap made by operation.

Patient being a stout, vigorous man, in good health in other respects, and with a good family history, and being greatly alarmed about the tumour and willing to submit to any risk in the hope of being relieved of it, I determined to operate. I took occasion to point out to the class two serious dangers which had to be encountered. First, the danger of speedy return, owing to the malignant appearance and history of the growth; second, the danger of osteitis, meningitis, etc., owing to the necessity of removing the pericranium, in which tissue it seemed most likely that the morbid structure had originated. Still, I had no hesitation in recommending the patient to take his chance and have the operation performed, and to this he eagerly assented.

Jan. 26th.—Chloroform having been given, I first of all removed the growth by a circular incision right down to the bone. I then peeled off the pericranium as far as it was exposed; and, finally, I applied pure chloride of zinc to the osseous surface.

A large number of vessels bled, and were secured by catgut ligatures. No attempt was made to close the gap, which was left to heal by the efforts of nature, aided afterwards by the introduction of many skin-grafts. The after treatment consisted in simple dressing to the surface of the wound, and its careful protection by cotton wadding. The bone at first appeared white and dead, but gradually points of granulation appeared and increased till the white surface presented the appearance of a healthy, healing sore.

Feb. 2nd.—Patient complained of a very severe pain in his head, and mercury was at once prescribed. The headache was relieved in a day or two, but it was not until the 22nd Feb. that it disappeared finally. At this time, also, a very thin layer of dead bone was floated up on the surface of the granulations, and was lifted off with the dissecting forceps.

March 3rd.—Wound nearly cicatrized, the islands of grafts having grown together all over the surface. Dismissed, cured.

April 17th.—Latest report from patient completely satisfactory in all respects.

The specimen was sent to the histological laboratory, and was carefully investigated by Prof. Stowell, who found the structure to be that of "*spindle-celled sarcoma.*"

CASE III.—J. W. Y., æt. 72, of Lansing, Mich. Admitted to the University hospital March 13th, 1882, on account of a tumour of the right thigh. The dimensions and situation of this tumour are

accurately shown in the woodcut, which is copied from a photograph from nature.

It extended from the perineum to within four inches of the knee. At Poupart's ligament, it extended inwards nearly to the femoral vessels. The left thigh measured thirteen inches, the right twenty-nine. When the patient contracted the muscles of the thigh, the tumour felt as hard as cartilage; when they were relaxed, it felt much softer, and several experienced surgeons had diagnosed fluctuation.

The following is the patient's statement of the history of his case: Ten years ago he observed a small, firm lump on the inside of the thigh, about five inches above the knee. It was about the size of a hen's egg when first observed. It was not painful, nor has it ever been so. Patient thinks that the growth has been much more rapid of late, and he believes that it interferes somewhat with his general health, as he is losing flesh and strength. On the whole, however, his general health is very good for a man of his age, and he is exceedingly anxious to be relieved of his encumbrance.

My diagnosis, as stated to the class on the occasion of his first appearance at the clinique, was *fatty tumour*. Still, as a good many experienced surgeons had diagnosed *cystic fibroid* (some of my colleagues among the number) I was induced to test the matter with an exploring needle. The result was negative.

The length of time the tumour had been growing, viz., ten years, was of itself sufficient to exclude the diagnosis of malignant disease, and therefore my original opinion seemed to be the more probable one. The only point which made me hesitate as to the propriety of operating was the size of the wound which would be left, and which, in a man of seventy-two, might prove to be too great a strain on his powers. However, the courageous spirit and vigorous constitution in this patient seemed to me to justify a hopeful prognosis, and I determined to accede to his urgent entreaties and perform the operation. The farther history of the case is soon told:

March 18th, 1882. In presence of the class I removed the tumour by one long, straight incision extending its whole length. Its fatty structure was at once demonstrated. The operation lasted but a few moments. A few small vessels required to be ligatured, which was done with catgut. Some redundant integument was then trimmed off, and the wound closed by nine hair sutures.

Very slight shock resulted; the wound healed very kindly, and within three weeks from the date of operation, the patient was dismissed, *cured*.

P.S.—For the histories of these cases I am indebted to my efficient clinical clerk, Mr. E. A. Christian, B.A.

THE ANTISEPTIC MANAGEMENT OF WOUNDS.

BY J. H. BARKWELL, M.D., ETC., BATTERSEA, LONDON.

The practice of antiseptic surgery, or Listerism, as it has been termed, *i.e.*, the keeping of a wound aseptic from first to last, requires not only a perfect understanding of the principles on which the treatment is based, but also a careful consideration of the means employed to gain that end, and a thorough knowledge of the difficulties to be met with. This can only be obtained by practice and experience; and gradually the slips and inaccuracies which may at first occur disappear. and we become educated up to the necessary standard of excellence, so that what we tried to attain formerly by unremitting attention and zeal we now gain almost

instinctively and without effort. For a full and elaborate account, we must seek the fountain-head in Lister's writings, or better still, attend the practical work under Lister himself, now of King's College, formerly of Edinburgh. Our first duty will be to consider the various antiseptics at present made use of. The main qualities required in an antiseptic are convenience, cheapness, and of necessity, efficiency. Carbolic acid so fulfils all these points, that it still retains its position at the head of the list, Mr. Lister himself having given up the use of thymol after a thorough trial. Carbolic acid, further, is volatile—a property essential to any antiseptic in use as a spray. The best form of acid to employ is the absolute phenol of Messrs. Bowdler & Bickerdike, price 6/9 per lb. Its advantages are, that it has no objectionable odor, is readily soluble, and does not irritate the operator's skin; while the more crude and impure forms met with are occasionally so disagreeable and harsh, that some German surgeons anoint their hands with vaseline before beginning work, in order to obviate this inconvenience. There are two watery solutions—strong and weak. The strong consists of one part of the acid crystals in twenty parts of water. It is used for washing and purifying the skin and instruments, for keeping sponges, drainage-tubes and horsehair soaking in and for the steam spray. The weak, which is half the strength of the strong (one in forty), is required for washing the sponges during an operation, for soaking the deep dressing in, and in dressing generally. The lotions should be filtered after being made, and had better be kept in large blue glass-stoppered bottles, properly and carefully labelled. An alcoholic solution of the strength of one part of the acid in five of spirits of wine, is employed for rendering those wounds aseptic which are seen a few hours after receipt of injury, and specially for those cases in which dirt and foreign matter have obtained access to the tissues. There are two oily solutions. The weak, of one part of the crystals in twenty parts of olive oil, is used for purifying and lubricating urethral bougies, sounds and catheters, immediately previous to their introduction; the strong, of one part crystals in ten of oil, may be applied to exposed dead bone in septic cases. A piece of lint soaked in the oil is laid on the necrosed part and covered with a piece of gutta-percha tissue. Antiseptic gauze is prepared by charging unbleached muslin of open texture with crystallized carbolic acid one part, common resin five parts, solid paraffine seven parts. This last prevents adhesiveness. Paraffine does not blend at all with carbolic acid in the cold, and therefore simply dilutes the mixture of carbolic acid and resin, without interfering in the least with the tenacity with which the resin holds the acid. The carbolized gauze, as prepared in the Royal Infirmary, Edinburgh, costs the establishment a little under 1½d. per yard; in retail shops it is much higher. The prepared gauze is used for the superficial dressing, for bandages, and in loose pieces for padding and dressing irregular surfaces; and also when wet, wrung out of 1.40 aqueous, for the deep dressing. The acid is only given off in sufficient quantity when the gauze is moist and at the temperature of the human body. Mackintosh consists of thin cotton cloth having a layer of india-rubber waterproofing on one side. This should be evenly applied and continuous, so that the material is quite impervious. There must be no pin-holes in it. It is used to place over the superficial dressing of gauze, as shall be described hereafter. Protective is made of oiled silk, coated on both sides with a thin layer of copal varnish, which renders the silk impervious to the carbolic lotion. Over this again a fine layer of carbolized dextrine is laid, which allows the 1.40 lotion into which the protective is dipped immediately before use, to wet and so thoroughly purify the surface. The protective is neither aseptic nor yet antiseptic, hence the necessity for making it so before application. Its action is thus purely negative. It keeps the edges of the wound clean, moist and free from the irritating action of the antiseptive dressing employed; allows discharge to escape readily from under it into the dressing; does not adhere, and so is easily removed when necessary. Carbolized catgut is prepared by adding twenty parts of carbolic acid crystals to two parts of water, and to this mixture add one hundred parts of olive oil. Place this mixture in a flask, and in this put several skeins of catgut. These should be kept above the level of the watery deposit which falls, by means of a few glass marbles or rods. Seal the flasks hermetically and set them aside in a cool place. The gut should not be used for five or six months, and the longer it has been prepared the better. Carbolized silk is prepared by immersing

a reel of silk in melted beeswax, containing about one-tenth part carbolic acid. The silk is drawn through a dry cloth as it leaves the hot fluid, to remove the superfluous wax. All these various requisites should be kept by themselves, apart from all other business. The various forms of steam sprays employed are constructed on the principle of Adams' steam inhaler. On arriving at a patient's house, we fill the spray with boiling water, which should always be kept ready for the purpose; so as not to detain one whose time is so very precious. We light the lamp and judge that steam is up, if it escapes with great force, and if it has a distinctly blue color when we shut off all the carbolic acid, which is done by compressing the carbolic tube with the fingers, and so seeing steam alone. One has also the peculiar rushing sound, the smell and taste of the spray to guide them in ascertaining if all is in working order. The other antiseptics employed may now be discussed. A solution of chloride of zinc, forty grains to an ounce of distilled water, was introduced by the late Campbell de Morgan. It is chiefly used to brush over the cut lips of incisions and wounds in regions which we cannot hope to keep aseptic, as in excision of the upper jaw, or lateral lithotomy. We may leave our dressing of strips of lint soaked in this lotion unchanged for forty-eight hours, so potent is the salt; and in this way, thanks to its searching character and non-volatility, the pain and unrest of dressing is avoided, and a dangerous period, during which blood-poisoning from absorption might take place, is tided over. Considerable pain and smarting ensue after application, and this continues for a varying period, according to the temperament of the patient. Boric acid is used as lotion, lint and ointment. It is non-volatile, very unirritating, in fact the least so of all antiseptics, but is not at all searching. It may prevent, it can hardly eradicate putrefaction. The lotion, of one part of the crystals in thirty parts of water, is colored red with litmus, and thus at a glance we may distinguish it from other lotions. It is used for moistening the boric lint and for washing sores. The lint is prepared by soaking ordinary surgeons' lint in a boiling saturated solution of boric acid, colored red with litmus. It is allowed to cool, the lint is hung up to dry, and the remaining fluid poured off and used as boric lotion. The lint is of a pink hue and glitters with the soft flat micaceous crystals. We moisten the boric lint with boric lotion before application, and this for the same reason as we also soak the deep dressing of gauze or the protective in carbolic lotion. The surface of the materials may be covered with germs of all kinds, because the antiseptic is not acting. We destroy these organisms by our active lotion, and as the aseptic discharge finds its way afterwards into the dressing, it dissolves and sets free quite enough of the stored-up agent to render it also antiseptic. Boric ointment may be prepared by rubbing up one part of finely levigated boric acid in five parts of vaseline. It acts as a sort of antiseptic protective, and is specially useful in the treatment of wounds in the face, where it allows the discharge to escape, keeps the wound sweet, and never adheres. An emulsion of salicylic acid in 1.40 carbolic lotion was introduced by Mr. Lister, for the purpose of checking the chemical changes which may take place under dressings which have been left unchanged for some time. These changes due to a chemical action between the gauze and the discharges under it, the sweat, etc., give rise sometimes to a troublesome irritation and eruption, formerly dubbed *ecrema carbolicum*. A very little salicylic cream smeared on the surface of the protective or deep dressing effectually disposes of this. In private practice one finds the carrying out of antiseptic details even less troublesome than in hospital. The spray is not so liable to get out of order, since it never changes hands. We do not make use of so many assistants, nor yet have we the convenience and benefit of bystanders to consider. The surgeon may carry in his spray bag a small supply of crystals of carbolic acid, so that he has practically a great quantity of lotion in a very small space; he has also sponges; but the dressings and lotion are usually found in readiness at the patient's house. While the patient is being anæsthetized, one gets the spray in order, arranges instruments and dressings. The spray during the operation stands on a small table, in a convenient position, and requires but little attention. Should the carbolic lotion in the spray bottle become exhausted, or should it be necessary to shift the position of the spray, then the surgeon merely lifts his guard out of the lotion, covers the wound with it, and then puts things to rights. Instruments may lie on a large plate or in a tumbler of water, their points being saved by coming in contact

with a cake of india-rubber laid over the bottom. Sponges of course are taken in hand by an assistant or nurse. The patient should be seen next day after operation, to see that all is going on well. The future dressings are managed as in hospital. A daily visit is not required, since by means of a post-card the patient may send word to the surgeon should discharge appear, or any discomfort be experienced.

DIABETES MELLITUS WITH ALBUMINUREA RESULTING FROM INJURY—RAPID AND FATAL TERMINATION.

BY J. ELLIS, M.D., MUSKEGON, MICH.

Mr. McC. consulted me, February 8th, 1882, regarding his daughter, a bright little girl of seven years and five months. She was suffering from marked dyspnœa from coming up stairs, and very weak, but felt well otherwise. From the father I learned that for two weeks past she had lost flesh rapidly, and was passing daily about a gallon of limpid urine; appetite and thirst both excessive. Having just come from the train from a visit to Canada, and the office temperature being in the neighborhood of zero, I simply gave a placebo and asked the mother to bring the child in the morning and some of the child's urine—suspecting diabetes. Next morning I was requested to see the child, as she was much worse; but as I could not attend Dr. Cook saw the case for me. The child was drowsy with flights of delirium; pupils dilated; labored breathing. He received two vials of urine which we examined separately—finding large quantities of sugar and albumen; specific gravity 1030. The microscope revealed large quantities of urates, with a few epithelial cells and tube casts.

Called at 12 o'clock—Child rapidly growing worse; difficult to arouse her; pupils would not respond to light, and widely dilated; respirations rapid; pulse small and irregular. 6 p. m.—passing into comatose state; marked serous effusions into pleura. Child died about midnight. The following interesting history was given by the mother. The child was always strong and healthy, never was sick except an attack of scarlet fever in November, 1880, which was mild, and to all appearances completely recovered from. Five weeks ago, while playing at school, she fell on the ice on her face, knocking out two teeth. After the pain ceased she seemed all right. The mother noticed shortly after this that upon waking the child she seemed bewildered and could not collect herself for some time. Three weeks since she became dull and was not so playful, and now seemed much dazed upon waking. She began to complain of distress in the stomach, and lost flesh. Two weeks ago her mother noticed an increase of appetite and thirst; also increase of urine voided; these latter conditions gradually increasing, till now her appetite was voracious, drinking almost constantly and voiding about a gallon of urine per diem. During the last two weeks she complained of headache and lassitude, also was fretful and did not want to play with other children. She continued to attend school until within a few days past. The treatment consisted of merely palliative measures as her condition was considered hopeless as soon as the case was satisfactorily diagnosed. A post mortem could not be had.

QUERIES.—I. Was the albuminurea primary or secondary?

II. Were both or either caused by the fall producing some lesion of brain or nerve centres?

III. Does diabetes mellitus of itself ever run such a rapid course (five weeks from injury, and only two weeks from first diagnostic symptoms)?

Correspondence.

ELECTRICITY IN CHOREA.

To the Editor of THE CANADA LANCET.

SIR,—The following letter from Dr. A. D. Rockwell, of New York, dated April 7th, I am permitted to publish, although not written for publication. I will preface it with the single remark, that I know of no one who has had larger experience, and no one, at least on this continent, who is a more reliable authority in the domain of electro-therapeutics.

"While electricity is of value in the various forms of spasmodic diseases, it must be confessed that its effects are frequently somewhat capricious. At various times I have had the pleasure of witnessing recoveries follow its use in chronic forms of writer's cramp, torticollis and even in palsy agitans, an interesting case of which I published in the October number of the *New England Medical*

Monthly. In the general use of electricity, I think it may be said that too little attention is paid to *detail*. The diseases to which I have referred can undoubtedly, as a rule, be much ameliorated, but it is too much to expect that at present we can hope to cure the majority.

"In regard to chorea, however, the case is different, and I wish that the profession could be impressed with the value of electricity in this disease. I do not refer to recent cases where in a few weeks the symptoms spontaneously subside, aided perhaps by some form of tonic treatment, but to those of a chronic character which persist in spite of judicious medication.

"You may perhaps accuse me of undue enthusiasm, when I say that I have never known a case even of long standing, fail to recover, when the methods of central galvanization and general faradization were faithfully and properly carried out. At the present time I have under my care a lad of 10 years, who has for over a year suffered from a violent form of post-paralytic chorea. His sorrows began with an acute attack of articular rheumatism, followed by partial hemiplegia and ending in chorea of the paralyzed side. An unpromising case, certainly, as could be well imagined. He is recovering rapidly. I treat entirely by central galvanization,—covering the head almost entirely by large well-fitting sponge electrodes and using currents sometimes from as high as thirty (30) cells. I should be sorry, if through any such statement as this, some one should use through the head of a child a current from as many elements as this, without due precaution in the way of the position and size of the electrodes, and in gradually increasing and in as gradually decreasing the strength."

Yours truly,

A. M. ROSEBRUGH.

121 Church-st., Toronto.
April 18th, 1882.

MEDICAL BATTERIES.

To the Editor of the CANADA LANCET.

SIR,—With reference to the communication of Dr. W. Philp, of Hamilton, in regard to the need of improvements in the construction of medical batteries, I have to say that, with your permission, I propose at an early date to give the readers of the LANCET a full description of a new battery recently made under my instructions, which gives me entire satisfaction. It is a modification of the McIntosh battery, but less complicated and much more convenient.

It contains 18 galvanic cells and a faradic battery, combined in the same case. The case is not much larger than the ordinary faradic battery and weighs when fully charged only 15 pounds, with electrodes and battery complete. I believe similar batteries could be supplied for about $45 each.

Yours truly,

A. M. ROSEBRUGH.

Toronto, April 20th, 1882.

Reports of Societies.

MICHIGAN STATE BOARD OF HEALTH.

Reported for the CANADA LANCET.

The regular quarterly meeting of this Board was held at Greenville, Michigan, on April 11, 1882, in connection with the Sanitary Convention held at the same time and place. The following members were present:—Rev. D. C. Jacokes, of Pontiac; J. H. Kellogg, M.D., of Battle Creek; Arthur Hazlewood, M.D., of Grand Rapids; Jno. Avery, M.D., of Greenville; and Henry B. Baker, M.D., of Lansing, Secretary. William Oldright, M.D., chairman, and J. J. Cassidy, M.D., member, of the newly appointed Provincial Board of Health of Ontario, were present and were invited to take seats in the meeting. In the absence of the president of the Board, Dr. Jacokes presided.

The Secretary presented the subject of inspection of immigrants, and stated that the National Board of Health had granted the request of this Board for an inspection service at Port Huron, and the system would go into effect on May 1, at which time the whole system, by coöperation of several State Boards of Health, would go into effect. He suggested that the health authorities of Toledo and Cleveland be invited to join in this movement. He stated that at the meeting of the Sanitary Council of the Mississippi Valley, at Cairo, Ill., April 19, this subject would be considered, and that it was desirable that this Board be represented at that meeting. By vote of the Board, Dr. Baker was requested to represent the Board at that meeting. Dr. Oldright spoke of the inspection of im-

migrants at Toronto, and of the importance of notification to other boards of danger to be feared from immigrants. He also said any movement made by this Board would meet with hearty coöperation by the Ontario Board. He said the work done by this Board for the restriction of scarlet fever and diphtheria was fully as important as that for the restriction of small-pox.

The following motion was carried :—

That the Secretary be instructed to correspond with the health authorities of the Dominion of Canada, and the several Provinces thereof, and of provincial and municipal boards of health where they exist, asking their coöperation in the proposed immigrant inspection service.

Dr. Hazlewood read a proposed document giving best household antidotes to be used in case of poisoning, while waiting for a physician or when one is not to be had. It was accepted and the committee authorized to modify it before publication in the Annual Report.

Dr. Hazlewood, in the committee on poisons, then presented a letter from Dr. Gordon, of Swartz Creek, relative to lead-poisoning by the use of a feeding-bottle (which was exhibited to the Board) in which the sinker keeping the supply pipe in the milk, was of lead and so arranged that all the milk had to pass over it before entering the infant's mouth. The Secretary was requested to notify the manufacturer of the pernicious character of the bottle, and the report was accepted, and ordered to be published in the Annual Report.

Circular 35, revised, relating to the duties of health officers, was presented, adopted, and 20,000 copies ordered to be printed.

Dr. Kellogg, one of special committee to prepare a circular on criminal abortion, made a report and read a proposed circular. The report was accepted, the committee continued, and the subject of issuing the circular laid over.

Dr. Kellogg was requested to represent the Board at the meeting of the American Medical Association at St. Paul.

The next meeting of the Board will be on Tuesday, July 11, 1882.

A MAN recently exposed to small-pox, took as a preventive, three quarts of whiskey. The coroner's jury after mature detiberation rendered a verdict of "death from excessive prophylaxis."

Selected Articles.

ABSTRACT OF CLINICAL LECTURES, DELIVERED AT THE LONDON HOSPITAL.

BY JONATHAN HUTCHINSON, F.R.C.S.

The Pre-cancerous Stage of Cancer, and the Importance of Early Operations.—The patient who has just left the theatre is the subject of cancer of the tongue in an advanced stage. As I demonstrated to you, the lymphatic glands are already enlarged. It is hopeless to think of an operation, and there is nothing before him but death, preceded and produced by a few months of great and continuous suffering. His case, I am sorry to say, is but an example of what is very common. Not a month passes but a case of cancer of the tongue presents itself in this condition. The cases which come whilst the disease is still restricted to the tongue itself are comparatively few ; nor does this remark apply only to the tongue. "Too late ! Too late !" is the sentence written but too legibly on three-fourths of the cases of external cancer concerning which the operating surgeon is consulted. It is a most lamentable pity that it should be so ; and the bitterest reflection of all is, that usually a considerable part of the precious time which has been wasted has been passed under professional observation and illusory treatment. In the present instance, the poor fellow has been three months in a large hospital, and a month under private care. I feel free, gentlemen, to speak openly on this matter, because my conscience is clear that I have never failed when opportunity offered, both here and elsewhere, to enfore the doctrine of the local origin of most forms of external or surgical cancer, and the paramount importance of early operation. I have tried every form of phraseology that I could devise, as likely to impress this lesson. Nearly twenty years ago, I spoke to your predecessors in this theatre concerning the "successful cultivation of cancer ;" telling them how, if they wished their patients to die miserably of this disease, they could easily bring it about. The suggestion was, that all suspicious sores should be considered to be syphilitic, and treated internally by iodide of potassium, and locally by caustics, until the diagnosis became clear. More recently, I have often explained and enforced the doctrine of a pre-cancerous stage of cancer, in the hope that, by its aid, a better comprehension of the importance of adequate and early treatment might be obtained. According to this doctrine, in most cases of cancer of the penis, lip, tongue, skin, etc., there is a stage—often a long one—during which a condition of chronic inflammation only is present, and upon this the cancerous process becomes engrafted. I feel quite sure that the fact is so. Phimosis and the consequent balanitis lead to cancer of the penis ; the soot-wart

becomes cancer of the scrotum; the pipe-sore passes into cancer of the lip; and the syphilitic leucoma of the tongue, which has existed in a quiet state for years, at length, in more advanced life, takes on cancerous growth. The frequency with which old syphilitic sores become cancerous is very remarkable; on the tongue, in particular, cancer is almost always preceded by syphilis, and hence, one of the commonest causes of error in diagnosis and procrastination in treatment. The surgeon diagnoses syphilis, the patient admits the charge, and iodide of potassium seems to do good; and thus months are allowed to slip by in a state of fools' paradise. The diagnosis, which was right at first, becomes in the end a fatal blunder, for the disease which was its subject has changed its nature. I repeat that it is not possible to exaggerate the social and clinical importance of this doctrine. A general acceptance of the belief that cancer usually has a pre-cancerous stage, and that this stage is the one in which operations ought to be performed, would save many hundreds of lives every year. It would lead to the excision of all portions of epithelial or epidermic structure which have passed into a suspicious condition. Instead of looking on whilst the fire smouldered, and waiting till it blazed up, we should stamp it out on the first suspicion. What is a man the worse if you have cut away a warty sore on his lip, and, when you come to put sections under the microscope, you find no nested cells? If you have removed a painful, hard-based ulcer of the tongue, and with it perhaps an eighth part of that organ; and, when all is done, and the sore healed, a zealous pathological friend demonstrates to you that the ulcer is not cancerous, need your conscience be troubled? You have operated in the pre-cancerous stage, and you have probably effected a permanent cure of what would soon have become an incurable disease. I do not wish to offer any apology for carelessness, but I have not in this matter any fear of it.

Empiricism and Specifics.—The patient whom we are about to discharge from the Talbot ward, cured of severe pemphigus, was admitted for a special purpose. He was sent in by my friend and former pupil Dr. Tom Robinsom, in order that he might be cured. You will say that the hope of cure is the motive which brings most of our patients to us. True; but in this instance there was something more than this. Dr. Robinson could easily have cured him himself, but he sent him here in order that I might work the miracle of cure under your eyes and thus claim your belief in the efficacy of drugs. You will remember his state when admitted; he was covered from head to foot with bullæ; the trunk was less severely affected than his limbs, head, and genitals; on these there was nowhere a space as large as the palm free from bullæ, and on the trunk also there were a considerable number. He was in a miserable condition from pain and irritation. The eruption had been out about ten days, and it affected the mucous membrane of the mouth as well as the skin. You may remember that we kept him in bed for a few days before we used the magician's wand, in order that all might see that there was no natural tendency to amelioration. More bullæ came out; then, without making the slightest change in diet, we ordered a few drops of a tasteless solution of arsenic to be swallowed three times a day. The result was, at our next visit, most of the bullæ had dried, and there were no fresh ones. He continued to improve greatly for ten days, when suddenly a few fresh small bullæ seemed to threaten a relapse. We doubled the dose of our remedy, making the dose eight instead of four drops; and, from that day, with the most trifling exceptions, the recovery has been uninterrupted. With such a fact before you, let me beg of you, gentlemen, to believe in drugs, and to treat empiricism with respect. In the prescription which I ordered, I availed myself solely of empirical knowledge; I prescribed, just as any old woman might prescribe, that which I knew would do good. Concerning the nature of pemphigus, I knew nothing; of its cause, absolutely nothing; of its clinical relationship, but little; of the *modus operandi* of arsenic, I knew scarcely more; but this I did know as a fragment of assured conviction, that arsenic would cause the pemphigus eruption to disappear, and the patient to regain his health. Far be it from me to speak slightingly of scientific work; let us by all means work as hard as we can in the laboratory and microscope-room, and penetrate as far as we possibly can into the mysteries of disease; let us never weary in our search after causes, or in our endeavor to find practical application for the facts of physiology. But, whilst doing this, let us remember that, as regards the relief of suffering, much of our usefulness must be based upon knowledge which is nowise scientific, but simply a matter of experience and memory. We have many specifics for many maladies, or rather for many symptoms, and he is the most successful practitioner who has stored in his memory the largest number of them. As years go on, we shall add many more to our list; and I doubt not that there are those who now listen to me who are destined to give help in their discovery; for discoveries in this direction are rarely made by single observers, but rather by the concurrent work of many experimenters, all keeping their eyes open, willing to try new things, and resolute to store faithfully the results of their operations. Iodide of potassium for tertiary syphilis, the bromide for epilepsy and as an anaphrodisiac, iodoform for phagedena and specific ulceration, balsam of Peru for scabies. So silently have these invaluable specifics been introduced into practice, that it

would puzzle most of us to say who first recommended them. I mention this fact, in order to show how important is the honest labor of all in the pursuit of therapeutics. We all prescribe, and we ought all, on system, to observe and record the results of our observation as to the effect of drugs. Five-and-twenty years ago, I believe that the case of pemphigus which you have seen cured would have been found incurable in all the medical institutions of the world, with one single exception. Much more recently than that, the disease was pronounced by Hebra to be invariably fatal. So, indeed, it would have been to this day, if we had not found out arsenic. I know of nothing else that will cure it. Our patient was already beginning to emaciate, and, in the course of a few months—possibly of a few weeks—he would have had to die, worn out by the constant discharge from his skin, had we not put arsenic into his blood. Never shall I forget seeing a poor wretched child carried on a bed into Mr. Startin's out-patient room at the Blackfriar's Hospital for Skin Diseases. It had been brought straight from the wards of one of our large hospitals, where, during three months, all had been done for its help that benevolence, aided by the science of the day, could suggest. Yet it was emaciated to skin and bone, and so covered with sores, that it was impossible to put his clothes on. A few minims of arsenic were prescribed, and in a few weeks the child was well. So much for empirical knowledge; so much for drug-specifics.

Prompt Amputation in Traumatic Gangrene: Importance of Amputation High Up.—In cases of traumatic gangrene, ought amputation to be performed without waiting for a line of demarcation to be formed? I believe that the reply of most surgeons to this question will be an unhesitating affirmative. Such certainly would be my own. We have recently had a very instructive case. A man aged more than fifty, but of good constitution, was admitted with a compound fracture of the lower third of the leg. We tried to save it, and the limb was put up in antiseptic dressing. The foot, however, became gangrenous, and, about the sixth day after admission, Mr. Tay amputated the limb below the knee, the man being at the time very ill. The amputation was done through perfectly sound parts, but it was presently followed by gangrene of the stump. The flaps became livid, and the man was in a most urgent condition. Mr. Tay and myself, in consultation, determined at once to perform a second amputation; and, within twenty-four hours of the first, this was done in the lower third of the thigh. The man did well, and the stump on the second occasion has made, as you saw the other day, a very good one. The main reason for prompt amputation in such cases is, that the gangrenous process is a very dangerous one. Whilst soft parts are dying, and the circulation still going on to some extent through them, the blood becomes poisoned by the absorption of gases and fluids from the putrescent parts, and a most dangerous condition of septicæmia results. Of this state a rapid pulse, a sunken countenance, high temperature, and vomiting are the most constant signs. It is remarkable how quickly they are sometimes relieved by the removal of the dying part. It may be that the process of mortification is also attended by a shock to the nervous system, but I suspect that the chief part of the mischief is done through the blood. In the pyæmia which results from phlebitis, it is of no use to amputate after once the poisonous emboli have been shed from the inflamed vein into the blood. It is then too late, for the secondary abscesses will form, whether you remove the original focus or not. In the septicæmia from gangrene, however, the case is different. Here it seems to be easily possible for the blood to rid itself of contamination. I well remember the case of a young soldier who was under treatment some years ago for a damaged foot, the consequence of a Canadian frost-bite. He had also obliteration of the femoral artery. My junior colleague at the time amputated through the tarsus. The stump never healed, and, some time after, I amputated in the upper third of the leg at a great distance from the disease, for the whole of his leg looked at the time as healthy as yours or mine. I went high up, because I knew that the femoral artery was occluded. The result, however, was that the stump passed into gangrene, and very soon we had all the symptoms of the most severe form of that malady. The patient had frequent vomiting, a very rapid pulse, and was indeed in such a critical state when on the third day I decided to amputate again, that I did not dare to have him taken from his bed. The second amputation, performed high up in the thigh, saved his life. No ill symptoms occurred after it, and the stump healed well. I am inclined to believe that usefulness of amputation in gangrene will become more widely appreciated, and that this measure will be resorted to, not exclusively in traumatic gangrene, but in all forms which are attended by serious constitutional symptoms. If a part be simply passing quietly into a mummified condition, and the patient's health not suffering, then there is no reason for interfering until you see where nature is going to make the separation. There is, indeed, no reason for interfering at all, for you must let nature finish the work. If you amputate near to the line of demarcation, your stump is almost certain to slough, and all that you must dare to do in the way of help in such cases is just to saw through the bones when they are laid bare. The explanation of disappointment in amputating for gangrene, whether traumatic or otherwise, is, I feel sure, almost always from amputating too near to the disease. In all such cases, we ought always to go high up. If the foot be

concerned, go above the knee; if the upper extremity near to the shoulder. You must think rather of the patient's life than of the length of his stump. Adopting this rule, I have of late years more than once amputated for severe forms of senile gangrene with very excellent results.

Can a Man have Syphilis Twice?—The man whom we have just seen offers a remarkable example of the occurrence of a second chancre soon after the first. His second sore has been, as I have repeatedly demonstrated, characteristically indurated. He is quite candid, and makes no donbt that this sore was the result of contagion. Yet it is barely a year since he had his first chancre, and this was followed by an eruption of which he had scarcely got clear when this second sore occurred. The case is proof that a man may have an indurated sore on the penis within a year of a former one, but it is not proof that he may have syphilis twice, for this patient has not, as yet, had any constitutional symptoms as the result of the last chancre. If, however, you ask me for an answer to the general question, Can a man have true complete syphilis twice? then I must reply clearly that he can. Such cases are rare—as rare, perhaps, as examples of second attacks of small-pox—but they do occur. I am at present attending a gentleman who has a terrible phagedenic chancre and rupial eruption, and who unquestionably had complete syphilis, chancre, sore throat, and rash, seven years ago. I have also a second case under care, very much milder, but illustrating exactly the same fact, with almost precisely similar dates. Second chancres are, however, far more common than second attacks of constitutional syphilis. Many of them are the result of fresh contagion, but seem to have no power to produce constitutional symptoms; but others are not from contagion at all, but form in connection with a taint still remaining from the first attack. It is a most important fact that indurations may form in the penis in every respect exactly like Hunterian chancres, not distinguishable in any way, and yet that they may be merely recurred sores, and the products of constitutional taint. I have seen this over and over again; and M. Alfred Fournier of the St. Louis Hospital has written a very instructive paper on this form of sore. In the case of our patient, it is obviously impossible to say, after the statement I have just made, whether or not his present sore is the result of fresh contagion. It may be simply a relapse, or it may be a gumma. He, however, confesses to exposure; and, as the sore followed in due course, it is probably true that he was afresh inoculated. Second attacks of syphilis are sometimes, as in the case just mentioned, very severe. The same has, I believe, been occasionally noted in recurred attacks of variola. As a rule, however, they are mild, or even abortive. Third attacks may even occur; and so may, as we are told, third attacks of small-pox. We must explain such facts, I expect, by reference to individual peculiarity and idiosyncrasy, but it is important that they should be known. The belief that syphilis can occur but once in a lifetime is very widely spread amongst a certain class of the public. I have watched with amusement the change in expression in many a young gentleman's face when he got my reply to his smiling suggestion—"A man can not, I suppose, have the disease a second time?"

Treatment of Lichen Psoriasis (*Lichen Ruber.*)—We discharged recently from Sophia ward a middle-aged woman, who was the subject of lichen psoriasis. As I explained at her bedside, I much prefer this name to either of the others by which this disease is known. As you know, it has been named lichen ruber by some, and lichen planus by others. It is, however, essentially a form of psoriasis. It occurs to the same class of subjects, is curable by precisely the same means, and, like psoriasis, is liable to relapse or to recur after considerable periods of health. The case which we have just been studying was of much interest in reference to the points to which I have adverted. Although it certainly was an example of the malady known as lichen ruber, yet in parts the eruption was not distinguishable from common psoriasis. It conformed to the lichen type in that it began in little papules, which occurred in groups; and, when a patch was formed, it was by the coalescence of a number of small papules. This mode of spreading is, perhaps, the chief feature of distinction between the malady in question and common psoriasis. The latter begins as a point, which, spreading at its edge, becomes a papule, which, again enlarged at its border, becomes a patch, possibly a very large one. Thus, psoriasis patches are always almost round, nummular, *i. e.*, like coins or rings, whilst those of lichen ruber are irregular, in lines or patches. In the case in question, most of the eruption was arranged in this manner, but some patches were not. On the elbow-tips and over the ulnæ were patches which, in mode of formation and in accumulation of scales, could not be distinguished from ordinary psoriasis. Our treatment of the case was exactly that of the latter disease—tar externally, and arsenic internally. In nine cases out of ten, these remedies will cure lichen psoriasis pretty quickly. Some of you may remember a man whom we had under care six months, a splendid specimen of the disease. He had been sent to me by Mr. Forshall, of Highgate. It was a first attack, and occurred to a healthy young man. I prescribed arsenic and tar. Through Mr. Forshall's kindness, I had an opportunity of seeing this man again last week. He told me that about six week's use of the remedy quite cured him, and that he has, during the last four months, remained without treatment

quite well. In our last case, however, we have not been so fortunate. Our patient was of a very peculiar nervous system, in fact almost insane, and the influence of arsenic appeared to be to excite her. Several times we had to discontinue it on account of the irritable condition it appeared to produce, and finally she was discharged uncured, in consequence of the trouble which she gave in the ward. As a rule I have found lichen psoriasis more easily influenced by treatment than common psoriasis. The cure is also usually more complete. The periods of immunity are also longer, often not less than seven years; whereas psoriasis, however good the cure, usually relapses, I think, within the year.

Chronic synovitis, arthritis, or struma: Importance of the diagnosis. We have had lately a great many cases of synovitis of the knee-joint. I think you will have observed that, roughly, we may divide all the cases of chronic synovitis into two groups, those which are connected with struma, and those which are of an arthritic nature, in the conventional use of that term. This division is of considerable practical value. Under the arthritic head, I comprise all that are associated with gout, rheumatism, or rheumatic gout, and all gonorrhœal rheumatism; and of all these, we may say that we expect them to get well. Sometimes there is stiffening, sometimes effusion is very long in disappearing; but still, in nearly all cases, in the end the patient again walks on the limb. It is very different with the strumous group. Here the tendency is to pulpy thickening of the synovial membrane, and to incurable conditions. It may be that destructive changes are warded off by long rest, but the patient is disabled, and the limb useless. We have half a dozen of this kind of knee now in our hands, not bad enough for amputation or excision, but still so bad as to prevent walking. In these cases, we are obliged to forbid walking, whereas in most of the arthritic cases, unless exercise causes pain, it may be permitted with impunity. A considerable variety of condition is presented in this group, and especially in the arthritic process, the older the patient, the more chronic and the less painful is rheumatism. You know that I am in the habit of insisting upon the importance of the patient's diathesis, even in cases of synovitis which is called traumatic. We admit a great many cases in which free synovial effusion has followed a sprain or contusion. In these cases, if the effusion lasts long, or if it is in excess of what its supposed cause will account for, you must suspect the arthritic diathesis. The patient is rheumatic or gouty. We have had numberless illustrations of this. Sometimes it is difficult to get at the exact facts. In the case of a man who has just left us, the synovitis persisted in spite of treatment, and relapsed after an apparent cure. It appeared likely that the case might end as hydrops articuli. I had repeatedly taxed the man with being gouty, but we could get but little evidence. Last week his employer called on me; I then learned that the man had been for thirty years employed as a bottler in wine vaults, and that his habits of free wine drinking had often nearly cost him his place. I was told that no objection was made to a bottler drinking as much wine as was good for him, and that complaint only resulted when so much was taken as to interfere with his efficiency as a workman. It is not easy to imagine a position more likely to produce a gouty state of system. We have since let this patient leave the hospital, supplied with a knee-cap. He still has some fluid in the joint, but he can walk without any pain. Exercise, which would of course be most injurious if the disease were strumous, will not hurt him.—*British Medical Journal.*

ERB ON THE REFLEXES.

Notes from one of Professor Erb's Lectures on the Diagnosis of Diseases of the Nervous System.

Although physiologists have busied themselves extensively with the study of reflex action in general, that branch of the subject which is of practical diagnostic value has been comparatively neglected. There is room for much valuable work even on the healthy subject, upon the reflex movements brought out by the stimulation of various parts of the body; and to the practical physician the subject is one of great importance.

The principal reflexes of diagnostic value are the skin, tendon, pupil, palate, and sphincter reflexes.

SKIN-REFLEXES. These are limited in health to certain parts of the body.

The reflex movement produced by tickling the *sole of the foot* is best seen in children and in "nervous" people. It varies greatly within normal limits, and with these variations it is necessary to become familiar before drawing diagnostic conclusions. This reflex is best tested by drawing the finger-nail or the handle of a percussion-hammer quickly from toe to heel. The result, as seen on the healthy man used for illustration, is a contraction of the quadriceps extensor. A slight contraction appears also in the muscles on the front of the leg, so that the foot is flexed as well as drawn away. In the foot itself no reflex is seen. This is the only normal skin-reflex about the foot, except sometimes a slight contraction when the dorsal surface is pinched.

Cremaster reflex. On stroking the anterior and internal surface of the thigh, a contraction in the cremaster muscle is seen to follow, by which the testicle is elevated. In a similar manner, the scrotal muscles contract when we pinch the skin of the scrotum. These contractions are, under abnormal

conditions, much decreased, and are normally more marked in boys than in adults.

The *abdominal reflex* is best tested with the patient lying down, as the abdominal muscles in the erect position are very tense. The abdomen should be unexpectedly stroked, and will immediately retract. This reflex is easily wearied by a few repetitions.

Mammillary reflex. In the normal subject, the nipple on being stroked becomes hard and elevated, that is, assumes a state of erection. At the same time the areola is drawn together.

Palpebral reflex is tested by approaching the eye quickly with the finger or by stroking the cilia. Under pathological conditions the conjunctiva may be touched to determine if palpebral reflex exist, though of course in health this stimulus is never necessary.

The foregoing are the only skin-reflexes found in the normal subject. In disease they may be wanting on the one hand or increased on the other, and new skin reflexes may be developed.

Tendon-Reflex. The value of the tendon-reflex in diagnosis was discovered in 1876, since which time the literature on the subject has multiplied rapidly. This phenomenon is produced by the stimulation of certain tendons, for example, that of the quadriceps extensor femoris. That the reflex is produced by stimulation of the tendon, and not of the skin, is easily shown on animals by removing the skin over the tendon; on man, by pushing the skin over the tendon to one side and stimulating it. This reflex appears in the healthy subject on stimulation of the tendon of the quadriceps femoris, of the triceps, and of the tendo-Achillis.

Patellar tendon-reflex. This is by no means easy to demonstrate in all cases in which it exists. The knee of the leg to be tested is crossed over that of the other, and the leg allowed to hang down with no muscular effort on the part of the patient. This position is preferable to the recumbent, for in the latter position the tendon is relaxed, the reflex being in all cases best obtained when the tendon is slightly stretched. A short, sharp, light stroke is given with the percussion-hammer on the tendon, just below the edge of the patella. The result in health is a contraction of the quadriceps muscle. The great difficulty to contend against is involuntary muscular effort on the part of the patient. The phenomenon is in health almost constant; but, as it is wanting in 1½ to 2% of normal subjects, its absence cannot be taken for an absolute sign of disease, which is an important fact to bear in mind. The patellar reflex may be, in disease, increased to such a degree that the least touch calls out a series of clonic contractions, or it may, on the other hand, be entirely wanting. It is wanting in tabes dorsalis, for example, and in atrophic paralysis, either of peripheral or of spinal origin. It is generally increased in cases of spinal lesion in the dorsal region.

Reflex of the tendo Achillis is tested as follows: The foot is held at a right angle to the leg, in order that the tendon may be slightly stretched. The tendon is then struck lightly about 2½ finger-breadths above the apex of the heel. A slight extension of the foot results in the normal subject. About the lower extremities there are no more normal tendon-reflexes, except sometimes a slight contraction of the abductors on striking the inner surface of the thigh.

Triceps reflex. This is called out by striking the tendon just above the elbow, the arm being held in a position of flexion. A slight reflex may be sometimes found in the biceps and in the flexors of the wrist, on striking their respective tendons. These reflexes are, however, very inconstant in health. In disease they may be very marked.

Here is a patient with an organic central lesion. He has a spastic gait, his legs are stiff, and he almost hops on his toes. In a patient with this gait we generally find exaggerated reflexes. On attempting to bend his knee we find a powerful resistance due to involuntary muscular contraction. We find an immense reflex following the slightest stroke on the tendon, not only below the patella, but even above it, over a triangular space which represents the spreading of the tendon. This reflex is in some cases so much exaggerated, that one stroke is followed by a series of clonic contractions.

In such a case as this one, the reflex of the tendo Achillis is best tested by holding the foot in the hand, with the thumb to the dorsum of the foot. The foot is now bent with a quick jerk towards the knee, and pressed firmly, though not too forcibly, upward. The result is a series of contractions, each relaxation being followed by a fresh stimulus as long as the foot is held firmly upwards. The fact that this stimulus is enough to keep up the reflex, is in itself evidence of a pathological condition. This phenomenon is in some cases best demonstrated by holding the foot in a position of abduction, in others of adduction. The phenomenon is almost never to be produced in health, though in persons with weak nerves two or three contractions may follow. When therefore, as in this case, a distinct series of contractions follow, a pathological state is almost surely diagnosticated, probably an organic lesion in the cord or brain.

As we proceed in the examination of the case before us, we find that striking the inner surface of one thigh calls out contractions in the adductors of both thighs. A reflex also follows stimulation of the tendo tibialis postici as it passes the inner malleolus; also of the peroneal tendons as they pass under the outer malleolus; also that of the tibialis anticus as it passes over the ankle. Reflexes from the biceps and from the wrist flexors are

marked. In this patient the plantar, abdominal, and mamillary reflexes are well shown.

The number of muscles exhibiting the reflex phenomenon may be, in pathological cases, much increased ; the deltoid, the scapular, and the dorsal muscles, for example, being included.

PUPIL-REFLEX is of great diagnostic value, and is exhibited in two ways : by narrowing on stimulation by light, and by widening on stimulation, for example, of the skin.

Pupil-reflex to light. The patient is placed facing a window, and the hand of the observer is placed over the eye. On the sudden removal of the hand, the slightest contraction of the pupil is noticed. The eyes should not be *closed* by the hand, or its removal may be followed by a contraction of the pupil, due to the effort of accommodation, which must not be confounded with the contraction due to the stimulation of the light. This accommodative effort of the pupil, which is not a reflex phenomenon, may be separately tested by directing the patient to look first at a distant, then at a near object.

Pupil-reflex to other stimulation than that of light. In sleep the pupils are very small. Let a person be suddenly awakened by a loud noise or other stimulus, and an extreme dilatation occurs. A similar dilatation may be brought about by a sharp stimulus to the skin. Let the patient look fixedly on a certain spot, say the observer's coat. If, now, the skin at the back of the patient's neck be pinched, a widening of the pupil ensues. The same reflex may be brought about by a strong faradic current, one electrode being placed at the back, and the other at the side of the patient's neck.

PALATE-REFLEX. While the patient is breathing as quietly as possible, with the mouth open, the palate may be touched with the end of a penholder. If the part is in the normal condition a retraction follows.

For the sphincter reflexes, we must depend in great measure on the history of the patient.

The reflex acts of coughing and sneezing may be tested if desirable, the former by powders blown into the larynx, or by observing the patient while choking, the latter by snuff or other irritating substances.

In pathological cases, a great variety of new reflexes appear, some following upon external stimuli, others upon natural acts of the patient. As an example of the latter, patients are seen in whom the passage of a stool is followed by clonic contractions in the muscles of the legs.

Among the many illustrations of reflex acts following external stimulus may be mentioned vaginismus, also micturition brought about by the pain of introducing a catheter. In one patient with decubitus, washing the sore always induced an act of defecation. An interesting example of abnormal reflex action was seen in the patient, who, though paralysed from the neck downwards, made a movement with his arm to remove the catheter on every attempt at introduction.—*Lond. Med. Rec.*, Nov.

INFLUENCE OF ANTISEPTICS ON THE PERIODS OF AMPUTATION AFTER CRUSHING INJURIES.

CLINIC BY STEPHEN SMITH, M.D., NEW YORK.

The boy about to submit to amputation of the leg, entered the hospital about four days since, suffering from a crushing wound of the leg, received by the wheel of a street car. The statement of the boy, and of the bystanders, was that the wheel traversed the leg just above the ankle, and an examination proves that they are correct. The limb was completely crushed in all its tissues at that point. But it must be remembered that it is usual for persons falling before a car wheel, and receiving injuries, to suppose that the wheel passed over the limb, when, in fact, this rarely happens. Such persons are greatly excited and severely injured, and naturally have the impression that the wheel passed over rather than by the side of the injured part. The truth is, however, that the wheel usually pushes the limb before it, and crushes and lacerates its side and fractures the bones. You can determine the nature of the injury by examination. If the wheel has actually traversed the limb, it will be, as in this case, so thoroughly crushed that bones are comminuted, muscles reduced to a pulp, and arteries, veins, and nerves destroyed. The entire destruction of a limb when a car wheel passes over it on a rail, may be tested by experiment with the dead subject. In such a test you will find it somewhat difficult to make the car wheel mount over the limb ; the tendency is to push the limb along on the track, and crowd it off upon one side. In this act the side of the limb will be lacerated and the bones broken, but the muscles, nerves, and arteries may be uninjured on the opposite side.

When called to a case of injury by the crushing effects of a car wheel, you should first examine to determine whether or not the wheel traversed the limb. If you are satisfied that it did pass directly over it, the limb cannot be saved ; amputation is inevitable. If, however, you decide that the limb was pushed off the rail by the wheel, the question of amputation will be more or less doubtful, according to the nature and extent of the injury. In our time we can save limbs that surgeons formerly would not hesitate to amputate. As a rule, if the arteries and nerves are still intact, the limb can be saved. Disinfectants and plaster of Paris, judiciously used, will save the most unpromising cases of this kind.

But the question which chiefly interests us in connection with this question is this : Why was

the operation, when amputation was, from the first, inevitable, delayed to this critical period? It will be a sufficient answer to that question to state that the patient is in better condition for the operation to-day than he has been at any time since the injury was received. In explaining this statement, I wish to emphasize the fact that antiseptics, efficiently employed in these cases, greatly modify our procedures. When it was decided that the injury necessarily involved the loss of the limb, the patient was profoundly under the influence of the shock of the injury. His surface was pallid, his pulse small and rapid, his respirations hurried; he was restless, and large drops of sweat stood on his forehead. The first indication was, therefore, to restore him from the shock, which threatened life immediately. Stimulants, dry friction, and external heat were employed. The second indication was to dress the limb. The appliances used were these, viz.: The limb was laid on a rubber cloth, placed on pillows, and so arranged as to make a trough, which inclined downwards towards and beyond the foot of the bed. Above the limb a bottle was suspended, containing a three per cent. solution of carbolic acid, from which common candle wicking depended; the wicking was so arranged that the carbolized water constantly fell on the entire crushed wound, and the water ran off into a vessel at the foot of the bed. The object of this irrigation was to prevent putrefaction and inflammation.

The patient slowly rallied, and at the end of eighteen hours was warm, and in a favorable condition. Formerly, this was the period for amputation, for the danger which the older surgeons feared was the impending inflammation, which usually began in about twenty-four hours. But no prudent surgeon has subjected such a patient to the second shock, which results from an amputation, without a feeling of keen regret, and with intense anxiety. Too frequently has he been arrested in his operation by the announcement of his assistant that the patient was pulseless. Artificial respiration, hypodermic injections of brandy, etc., have rallied the vital forces so that the operation could be completed, and the patient removed to bed. But the revival was momentary. The nervous centres were too profoundly damaged to maintain their functions and death was inevitable.

Since carbolic acid has become so generally used in wounds I have ceased to regard time as an element in amputations. My attention was first called to the power of this class of agents to prevent inflammation, many years before carbolic acid came into use. A crushed foot came under my care, and it was doubtful whether an amputation would be required or not. I suspended the limb, and irrigated the wound with creasote water for ten days, during which time there was not the slightest evidence of inflammation in the part, nor was there any fever. At the end of that period it was apparent that the foot could be saved, and only the simplest dressings were required to perfect a cure.

It is now a matter of every day's experience that carbolic acid constantly applied to crushed tissues, as in irrigation, will arrest all tendency, both to putrefaction and to inflammation. This boy is a striking illustration of the power of this agent to protect a patient from those secondary evils which occur to injured parts. For four days this patient has been recovering from the primary injury, without being in the slightest degree damaged by the local conditions. There has been no other fever than that of reaction from nervous prostration, and that passed off on the second day. He has been taking food freely, his sleep is sound and refreshing, his pulse is nearly normal, and in every respect he seems to be fully restored. The shock of amputation will now be comparatively slight; certainly will not be dangerous in the sense it would have been if I had amputated within twenty hours of the injury. But to guard him against the possibility of harm, he has been taking two teaspoonfuls of whiskey with milk, every hour for four hours, which has caused moderate exhilaration.

It is not absolutely necessary to amputate to-day, so far as the limb is concerned, for we can maintain it in this inert state for many more days, but the patient's general condition is entirely favorable, and as amputation is inevitable it might better be done now, and thus diminish the total length of time required for recovery.

The lesson which I wish to impress upon your minds is this, viz.: In crushing injuries requiring amputation, treat the lacerated parts with carbolic acid water applied by means of irrigation, and delay the operation until the patient is in a favorable condition to endure the shock. I need scarcely say that the same treatment should be adopted in similar injuries which do not require amputation, during the period of impending inflammation. But to be useful, the solution must penetrate the injured tissues, and to effect that it is often necessary to make incisions through the skin.

The leg was amputated below the knee with but slight shock, and the patient made a good recovery.—*Medical News.*

EXCISION OF THE KNEE.

BY P. J. HAYES, F.R.C.S.E.

Nearly ten years have elapsed since I introduced the practice of excising the knee-joint for chronic articular disease, of progressive character, at the Mater Misericordiæ Hospital. Previous to the period of my connection with the hospital, excision

of the knee had been performed in one instance, but the result was so unfortunate that every member of the medical staff became in a measure prejudiced against the operation. My success induced my *confreres* to adopt the operation, and I can unhesitatingly state that our practice throughout has been eminently satisfactory.

Calculating all the cases of excision which I have had under observation, my experience extends to more than forty patients, but in the following table I enumerate cases which have been treated solely by myself, and put up in the apparatus which experience of other methods caused me to devise. From this table of fourteen cases it will be seen that eleven recovered with excellent limbs. In three cases—where I was induced to operate against my own desire and opinion—secondary amputation was required; of these, one recovered, one soon died of phthisis, and one died within a week after the second operation.

From time to time I have read in our leading journals observations condemnatory of excision of the knee, the fatality after operation being high, and even when life was preserved the limb remaining in an unsatisfactory condition. Again, I have observed suggestions emanating from surgeons who believe success can be almost insured by preserving the continuity of the soft parts in front of the joint. I can only say that in my large experience of knee excision the greatest measure of success seemed to be due to performance of the operation and retention of the limb according to the method which I have advocated as well as practised.

My former papers may have been either unnoticed or forgotten—hence to-day I venture to repeat, with certain modifications and additions, my description, in the hope that other operators will be induced to pursue a method which is, in my opinion at least, the most likely to afford satisfaction and success. The steps of the operation for exsection of the knee are too well known to render any lengthened account of the procedure needful. I usually flex the leg moderately, and, having defined the posterior margin of the femoral condyles, I cut from one of them to the other, straight across the ligamentum patellæ and into the joint. At this stage the patella may be dissected from its attachments, but if fixed to the femur its separation will probably be postponed until after division of fibrous connections between the femur and tibia. I prefer cutting through the lateral ligaments before proceeding to the division of either the normal or abnormal structures occupying an intra-articular position; also, when dealing with the latter, I keep the leg strongly flexed and direct the cutting edge of the knife against the articular surface of the head of the tibia, rather than towards the ligamentum posticum. I never attempt to clear the posterior aspect of either the femur or the tibia before applying the saw. I sever the bone from before backwards, and break through the posterior surface of each bone. This is done with the view to avoid injuring the posterior ligament and corresponding fibrous connections between the femur and tibia, it being an advantage to preserve, if possible, these tissues, as they not only assist to maintain contact between the sawn surfaces, but also, should suppuration occur in spite of antiseptic dressings they will in all probability prove a barrier against the entrance and burrowing of pus into the popliteal space.

As the *raison d' etre* of this communication refers to my method of putting up the limb, I shall describe in detail the steps to be adopted. Presuming that the operation will have been performed under an antiseptic spray, the spray should now be directed across the region of the knee, so as to avoid any unnecessary wetting of lint, bandages, etc. Carbolized sponges are to be maintained in contact with the angles of the wound, so as to absorb all blood flow whist the leg and thigh are being washed and bandaged.

The surgeon next applies a soft flannel roller evenly, but loosely, around the limb, from the toes to a point about two inches below the inferior lip of the operation-wound, and over this a second roller is to be adjusted, thus providing the leg with a sufficiently thick and soft covering. In like manner the thigh from the groin to about two inches above the wound is to be loosely encased with a couple of flannel rollers. The limb being ready for application of the splint, the patient is to be brought *thoroughly* under the influence of ether so as to produce complete relaxation of the muscles. The splint consists of two concave pieces of perforated iron—the one moulded so as to fit the posterior aspect of the leg, and the other adapted to receive the posterior surface of the thigh, connected posteriorly by means of a strong, flat, but narrow bar of iron, so bent as to form an oblique step about three inches long, and having the end to which the leg-piece is attached exactly one inch in advance of that fixed to the thigh-piece. This apparatus is to be provided with pads arranged for leg and thigh—the leg pad being made thicker below than above—and then it is to be carefully adjusted behind the limb. A soft pad is now to be laid in front of the thigh near its lower end, and on this pad a concave piece of iron about four inches long, by from two and a half to three inches wide, is to be placed. Sometimes I lay a square of poroplastic substance larger than the concave plate of iron between the latter and the pad. The next step is to firmly secure the thigh in the upper part of the splint. This is done by encircling the splint and limb with a strong strap which is to be tightly buckled across the upper part of the anterior small splint, whilst lower down the strap of a Petit's tourniquet is to be fixed, the brass of the tourniquet resting against the anterior

splint. As both straps will have been drawn extremely tight, it is clear that one or two turns of the tourniquet will firmly press back the lower end of the femur, so as to render the anterior surface of that bone flush with the anterior surface of the tibia.

Entrusting the upper part of the limb to his assistants, the surgeon next proceeds to encase the foot in several turns of a gypsum bandage, which is to be carried upwards encircling the leg and lower part of the splint as high as the point at which the flannel bandage terminates. While this is being accomplished the foot must be held at right angles to the leg, lest extension of the ankle should occur and prove a source of trouble at a later period. When the operator will have satisfied himself that the limb has been properly arranged and secured, the wound is to be closed, while drainage is to be provided by having short, flanged tubes inserted, either at the angles of the original wound or through button-hole apertures which may be made still further back. After the application of antiseptic dressings the limb is to be swung by means of a loop of calico passed behind the leg-piece of the splint and tied to the bars of a strong and high fracture cradle. It will be seen that my apparatus forms a light, portable, but extremely secure, means for fixing the limb. A foot-piece is altogether unnecessary, as the gypsum bandage encircling the leg and splint constitutes a firm boot. Shortness of the thigh-piece, combined with suspension of the leg, enables the patient to assume a sitting posture and change position without risk or discomfort.

I have frequently encountered cases of articular disease where the morbid affection seemed limited to the soft structures, but where complete exposure of the bony surfaces disclosed the presence of localized caries and of suppuration in the osseous tissue. This fact alone would determine me against attempting to perform excision by making the comparatively small lateral incisions recommended by some surgeons. Moreover, an unwounded state of integument in front of the knee cannot prove of any real advantage to the patient, as the rule, in my experience, has been for the central portion of the operation wound to unite by the first intention, whilst at the time of putting up the limb the surgeon is enabled clearly to see as well as to feel, and of course to regulate, the respective positions of femur and tibia.

Whenever I have to deal with a cavity in the cancellous tissue of either the tibia or the femur, I scoop the space clear in the first instance, then by means of a small piece of fine sponge wetted with chloride of zinc solution (gr. 20, ad ℥ i.) I mop the cavity thoroughly—in many cases I have judged it necessary to drill the bone, so as to make a free counter-opening from the deepest part of the bone cavity in the track of the operation-wound. I never sponge a wound in the soft parts with chloride of zinc solution, for I have found the salt to cause a considerable flow of blood-stained serum, calculated to prevent union by adhesion. I always arrest parenchymatous bleeding (which is sometimes inconvenient after the removal of Esmarch's bandages), by applying to the wound a succession of sponges squeezed out of *very* hot carbolic solution, after the method proposed by Dr. P. Browne. This proceeding will control oozing from the bone surfaces, as well as from soft textures, and it in no way tends to interfere with the early development of repair. I have never seen bleeding from a large nutrient artery in bone, but if the surgeon should encounter such, I think hæmorrhage could be at once arrested by plugging the canal with a pointed piece of decalcified bone cut from one of Neuber's drainage tubes.—*Dublin Journal Medical Science*, Feb.

ACUTE ABSCESS IN THE NECK.

CLINIC BY S. W. GROSS, M.D.

You will observe in this young man, who is apparently about nineteen years old, a decided swelling, which takes up a large portion of the anterior triangle of the neck, that triangle which is bounded in front by the median line of the neck, behind by the sterno-cleido mastoid muscle, and above by the body of the lower jaw.

As to the history of this tumor, the patient says it began two weeks ago, apparently without any assignable cause, and has continued increasing gradually in size till the present time. We observe that the overlying integument is markedly discolored, and of a dusky red appearance. He complains also of pain of a throbbing character, which is increased at night when in the recumbent posture. Upon examining the swelling we find that it is soft, that there is fluctuation, and that immediately over the body of the mass is felt a distinct pulsation, which is synchronous with the beats of the heart. Do not be led astray by this symptom of pulsation, it is merely the result of the coincident that the swelling immediately overhangs the carotid artery. This is not an aneurism, and why? The pulsation is conveyed to the swelling from below, and is distinguishable only by placing the hand over the body of the mass, but it is not felt when the fingers are placed upon its opposite sides, as would be the case were the tumor an aneurism. Then, too, the aneurismal thrill is absent, and the discoloration is not that of a bloody tumor.

In all cases of this kind, no matter how certain the diagnosis may appear, before recourse is had to the knife the exploring needle should be used. The most careful observer may at times be mistaken. Some years ago a prominent surgeon in

Edinburgh saw a tumor situated below Poupart's ligament, which had been diagnosed by other and equally prominent men to be aneurismal ; but his opinion differed from the rest. He was confident that it contained pus. He plunged in his bistoury and found it as he had anticipated. Again, he saw a tumor in the anterior triangle of the neck, which others had also pronounced aneurismal, but which he conceived to be the same as the one first seen. He opened it and caused the almost instantaneous death of his patient, and he himself was found dead the next morning in his office, so great was the impression the case made upon him. Remember this story and never forget to use the exploring needle ; it will some day reward you handsomely.

A very good way of opening an abscess in the neck is to introduce an exploring-needle, and then to pass in the bistoury upon its groove. In this manner you are pretty sure not to wound important structures, while at the same time a good, free opening is unhesitatingly made. The pus should be allowed to flow by atmospheric pressure.

The discharge from this abscess (which is a large one) is quite abundant, and the amount of suppuration which will take place in the next few days will give rise to considerable constitutional weakness. We will therefore put him on the tonics of quinine and the tincture of the chloride of iron, giving from seven to ten grains of the former, and from thirty to forty minims of the latter during the twenty-four hours. An emollient poultice will be applied for the double purpose of keeping up a free flow of pus and of preventing the opening we have already made from closing.—*Med. and Surg. Reporter.*

HYSTERICAL AFFECTIONS OF THE LARYNX.

Hysterical Aphonia is caused by paralysis of the muscles of the larynx. The muscles most commonly seized are the vocal muscles. Nevertheless, paralysis of the posterior crico-arytenoids is not absolutely rare, and we have known a case of this kind in which a hysterical female has been twice tracheotomized. A primary symptom of hysterical paralysis is that it is frequently bilateral, or else the paralysis is one-sided, but complicated with paresis or contraction of the opposite muscle. Thus hysterical aphonia is often complete. It is, besides, a common enough occurrence, this diffusion of hysteria in organs which are impaired, and which are not symmetrical, as the ovaries. A second symptom of hysterical aphonia is that it frequently gives a laryngoscopic image differing the one day from the other. A third characteristic is to leave the cough intact, which even gains in intensity and breaks forth into roaring. We have even seen some cases of hysterical aphonia where the patient could sing, and some who could speak in their dreams.

SPASM OF THE LARYNX.

The hysterical laryngeal spasm his its characteristics which distinguish it from the spasm of infancy, from the spasm from an irritation of the vagus nerve or of the recurrent, and from the spasm from the introduction of a foreign body into the larynx. This spasm is expiratory or inspiratory. The expiratory spasm is nothing else than the whimsical cough of the hysterical, a symptom common to nearly every hysteric, but one the most painful. In a boy 14 years of age we have counted as many as twenty-five coughs per minute during weeks. This child was cured by a heavy rain which overtook him during a walk, and to which he was exposed for two hours. At other times the hysterical cough is cured by the intercurrent affection which has been its primary cause. We know the fortunate consequences of the cure of uterine maladies from the hysterical cough. This hysteric cough was the cause of many errors being made before the laryngoscope had unveiled the exact state of the larynx. When it is met with in young girls associated with supplementary hemoptysis, it gives rise to a prognosis of which the gravity is only apparent.

LARYNGEAL HYPERÆSTHESIA.

Hysterical laryngeal hyperæsthesia is very common. It is perhaps the most frequent manifestation of hysteria in the larynx. It is sometimes diffuse, and manifests itself by various sensations—sensations of burning, tearing, pulling, going from the throat to the sternum, sensations of a foreign body. Who does not remember being called out in great haste to see a woman who had swallowed a pin, a fishbone, etc., and who was in the greatest agony. After a conscientious examination, we find that the patient has been mistaken by a false sensation, and that we ourselves have been the victim of a false alarm. But it is not always easy to convince these same subjects that it is not a rare thing to find among them veritable cases of laryngeal hypochondriasis.

LARYNGEAL ANÆSTHESIA.

The result of our inquiry on this subject is that only in one-sixth of hysteric patients we have met with more or less complete anæsthesia of the epiglottis. It is the epiglottis which is frequently attacked by anæsthesia, and frequently to the exclusion of every other part. Anæsthesia may have completely mastered the whole of the larynx, and be absolute. Generally it is bilateral, and is not limited to any well-defined nervous territory. This characteristic sometimes sufficiently distinguishes it from other anæsthesias, which are as extensive as one of the areas of one of the superior laryngeal nerves, such as diphtheritic anæsthesia. Another important and special characteristic of this anæs-

thesia is that it is frequently associated with a cutaneous patch of anæsthesia on the front of the neck, a peculiarity already noticed with reference to hysteric aphonia. The simple introduction of the mirror is sufficient to cause many of these anæsthesias to disappear.—*Edin. Med. Jour.*

FREEDOM IN CONSULTATIONS.

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It was hardly supposed when the code was adopted, giving freedom of action to every man regarding consultations, that there would be a lack of opposition to the movement by outsiders. Whenever an old rut is left and a new road projected, the first passengers generally have a rough time of it. They must expect this, and bounce over the old prejudices as best they can. In so far, perhaps, the State Society has in a measure, come to a realizing sense of the radical character of its recent departure. But as yet there is no sign of weakening as to the stand taken. In reality, there is no good reason why there should be. Far from being in the wrong, the profession of this State have taken a much-needed step in advance. The cry that concessions have been made to irregular practitioners is simply absurd. The assertion that the honor of the regular profession has been sacrificed to the mere expediency of obtaining extra consultations is ridiculous. The profession of this State have a birthright which has never been for sale for any such price. The action regarding free consultation was based solely upon the principle that medicine was a broad and liberal profession, and that every barrier which interfered with the expansion of its usefulness and the increase of its influence should be broken down. The soundness of this doctrine cannot be questioned even by the most contumacious sticklers for the National Code. The best reason for rebuking bigotry and dogmatism is to be found in the fact that we are free from any suspicion of them ourselves. And this results when the opportunity is given to every one desiring it to search for truth wherever it may be hidden, and in his own way. * * *

Of course we hear all sorts of absurd things concerning the desertion of the old flag, of going over to the enemy, of acting in defiance of all the principles of right and justice regarding professional associations, and of doing many other terrible things tending to encourage quackery. But in reality the State Society has only done a common-sense thing. It merely states that any medical man who chooses to act according to his best judgment in consultation with any honest practitioner whatsoever, can do so without being subjected to discipline for such opinion's sake. He is not recommended to consult with any one whom he may consider an improper person; he can refuse to consult with any one, regular or irregular, if he pleases so to do. No effort is made, directly or indirectly, to do aught to recognize quackery in any of its forms. Certainly the honor of the profession can as safely be trusted, perhaps, in the working out of this apparent problem of requisite qualifications for consultation as in a blind obedience to the dicta of any committee on ethics. * *

We repeat that the Medical Society of the State of New York has done nothing of which it may be ashamed. It can take nothing back, so far as freedom of consultation is concerned. The stand taken is an eminently proper one, and we hope it will be persistently maintained, even at the risk of non-representation in the American Medical Association. It will, in any event, be only a question of time for the Association itself to follow the example of the Society of this State. The free and progressive spirit of medicine can no more be trammelled by foolish restrictions as to the conduct of its members than can its grand principles be made to revolve upon doctrinal points, or its legitimate aspirations be controlled by mere sectarian influences. The religion of medicine is as broad as humanity itself, and should compass it at every point; its faith, founded on facts in science, should reach out in every direction for new strength; and its mission to cure the sick should not stop short of the use of every means within honest reach. The darker the places beyond, the higher we should raise our torch, and the more persistently and earnestly should we press forward. The Medical Society of the State of New York has striven by its recent action to give such a doctrine its most liberal interpretation, and such a faith its most practical turn.—*New York Medical Record, April 15th, 1882.*

UTERINE DISPLACEMENTS.

Paul F. Mundé, M.D., in the (*American Journal of Obstetrics*, Oct. 1881), gives the following conclusions deduced from his large and varied experience:

1. Recent displacements of any variety are the only cases which offer a fair chance of complete recovery by any of the mechanical means at our disposal.

2. Of these means pessaries are the most convenient for temporary relief, but only in a small number of cases does permanent cure result.

3. The best curative means of support of the displaced uterus is probably the systematic and intelligent use of vaginal tampons, impregnated with a mild astringent solution.

4. Posture, while excellent as a means of relaxing the uterine supports and relieving pelvic congestion, is by its inconvenience at best but a means of temporary relief.

5. Permanent relief, cure, can be expected and

will be obtained only when the displacement is of recent origin, especially when it has been produced by some sudden physical shock ; or when the complete tissue-metamorphosis accompanying puerperal involution aids in restoring to the uterine supports and the uterus itself their original and healthy tone. This fortunate occurrence must be looked upon as decidedly the exception, since the favoring circumstances above mentioned are but rarely met with, or the displacement is seldom recognized at a sufficiently early date to permit of a perfect restoration to health.

6. The most favorable period, therefore, for the treatment of a uterine displacement, or distortion with a view to a permanent cure, is within one or two weeks after delivery, before the woman has left her bed.

7. The excitation of a certain amount of plastic exudation in the walls of a flexed uterus may, if kept within bounds, result in a permanent straightening of the organ. This may be accomplished by rapid dilatation, or by the protracted wearing of stem-pessaries, but permanent success will at best be rare.

8. The protracted use of astringent vaginal tampons introduced daily, offers for some cases of ante and retro-displacement an excellent, and for most cases of procidentia, almost the only efficient and safe remedy for the displacement, far superior to all steadily worn hard or soft pessaries. A procidentia may even be cured by several months of this treatment, if the affection be not of too long standing.

9. While permanent cure is only occasionally met with, so much relief is afforded by pessaries and the other mechanical supports and methods above discussed, they should in no case be discarded unless all treatment be contraindicated.

10. Electricity, if rationally and scientifically applied for a sufficiently long period, offers chances of cure of comparatively recent cases, which call for a more thorough and persistent trial of the method.

11. For prolapsus uteri et vaginæ, unless of quite recent origin, an operative constriction of the vaginal canal and a restoration of the relaxed or destroyed perineum to its normal state is the only sure means of cure, and even for this affection the unfailing method remains to be discovered.

12. The cure of a flexion by operative (bloody) treatment is impossible. The canal may be made comparatively straight by a division of one or both lips of the cervix, but the flexed condition of the organ still remains. Only by gradually increased elevation of the fundus by a vaginal pessary (best Thomas' cup) after delivery, or by the protracted wearing of an intra-uterine stem, and that only in a small proportion of the cases can a permanent cure be effected.

PROFESSIONAL LIBERALISM.

View it as we may, there can be no doubt that in ethics the profession of medicine is much less consesvative than it was a few years ago. Progress is so gradual that those who live during a period of changes fail thoroughly to realize them, since they come one by one, allowing time for custom to breed familiarity with the first before the second follows on its heels If, on the other hand, the spirits of Astley Cooper, John Hunter, Chapman, Dewees, Jackson, and Physic, could return for a short time to their ever remembered localities and duties, think for a minute what they would see. Their eyes would become round wiih amazement, as they read of the utterances of distinguished English physicians, in favor of admitting homœopathics to their consultations. They would see the wife of the distinguished editor of one of our greatest journals herself a distinguished and cultivated physician. They would stand aghast when they heard that the medical profession of one of the greatest States in the world had rendered it officially proper to consult with a sect, the members of which they, in their day and time, avoided and shunned, professionally, with as much or even more care and assiduity, than they did the devil himself.

They would find physicians in good standing officiating as teachers in medical colleges for women. They would be informed that several medical societies of repute had opened the door of membership to female physicians. In time their unsophisticated minds would awaken to the various devices used by their modern confreres to secure practice, and they would be almost paralysed when they learned how much wire-pulling and political intrigue had entered into their beloved profession.

We do not mean to say that this is not all right. We are champions of progress, and rejoice when we see human nature advancing. We merely desire to enable our readers to enjoy with us the real amusement that would be afforded by the puzzled and half incredulous expression that would occupy the faces of these old medical war horses were they enabled to see and hear what we do, and to watch them throw up their hands in astonishment, as they exclaim, "*By the shade of the great Hippocrates, but this is an age of progress*," as they vanish from sight into the dim mist of uncertainty, born of their doubts as to whether all this seeming progress will redound in the end, to the real and substantial advantage of their ancient profession.—*Med. and Surg. Reporter.*

VENEREAL AFFECTIONS IN GUATEMALA. — According to the *Diario de Centro-America*, an official examination of the public women of Guatemala proved that over ninety-five per cent. of these unfortunates were in bad health.

CASCARA SAGRADA FOR CONSTIPATION.

Dr. Boardman Reed *(Med. Bulletin)* says :—For the past two years I have been making constant use in my practice of the fluid extract of Cascara Sagrada *(Rhamnus Purshiana)* for chronic constipation. It always affords relief in even the most obstinate and inveterate cases, and often seems to effect a permanent cure. My methods of using it are as follows: For persons who do not object to the intense bitter taste of the medicine in plain water, I order a two-ounce bottle of the fluid extract, with directions to begin by taking ten drops in a wineglass of water before each meal. If within two or three days this does not produce a regular natural evacuation every morning, the patient is told to increase the dose by two or three drops every day until the required effect is produced; then to continue with that amount regularly three times a day for a week or ten days. At the expiration of this time, I advise that the dose be decreased again by taking one drop less every day, until it is reduced to nothing. Then, if the habit of soliciting a movement punctually at a regular time every morning is kept up, there is usually no more difficulty. In many cases the initial dose of ten drops three times a day is quite sufficient. Occasionally it is found too much, and five or six drops answers every purpose. In the more obstinate cases, however,—cases of patients who have accustomed themselves to take three or four compound cathartic pills, or some harsher quack concoction, every few weeks or days, "to keep their liver acting,"—the bowels sometimes require half a teaspoonful, and in rare instances even teaspoonful doses, three times a day to bring about regular alvine evacuations. Taken in this way before meals this medicine acts as a tonic to the stomach, increasing the appetite and improving the digestion, at the same time that it strengthens the peristaltic movements of the intestines and apparently stimulates the normal functions of the liver. But the cascara is one of the bitterest of medicines, and many persons, especially ladies and children, cannot take it unless it is first well disguised by elixirs, etc. For the benefit of these I have been accustomed to compound it as follows:

R—Ext. Cascara Sagrada,	f ℥vj.
Glycerinæ,	f ℥j.
Curacoa,	f ℥ij.
Syr. Glycyrrhiz. ad.,	f ℥vi.—M.

A teaspoonful of this mixture, which is comparatively palatable, will represent about ten drops of the cascara; and a tablespoonful will represent half a teaspoonful of the same, which is usually all that the worst cases require, taking it three times a day. A solid extract of the same drug is now prepared, so that it can be ordered in proportionate doses in pill form for those who prefer pills to potions. These cascara preparations seem to me to act even better than the famous dinner pill, and aloetic pills which have been so much in vogue for two generations at least. One thing is certain, they accomplish the purpose of a laxative most admirably, and usually—though not in every case—the dose can be diminished or even omitted altogether after a time, while other laxatives nearly always lose their effect, larger and larger doses becoming necessary.

PNEUMOTHORAX.—Text-books of physiology describe the thorax as an air-tight box containing the heart, lungs, and great vessels; and, after a fashion not particularly clear in any single work, an attempt is made to demonstrate the bearing of this fact on the progress of various chest complaints. The importance attending a thorough comprehension of the physics of the pleural cavity, is probably not fully appreciated by students until they attempt to apply in the wards of the hospital the theories learned in the lecture-rooms of the college. Nor, probably, is this difficulty ever more apparent than when a hesitating clinical clerk is suddenly required to explain the *rationale* of pneumothorax. Rarely is an intelligent and at the same time intelligible reply forthcoming to the question, and we remember more than one case in which *not any* scientific or appropriate description has been elicited.

The question is not abstruse, either; but it demands a certain amount of clear thinking, added to an accurate preliminary comprehension both of the anatomy of the lung and pleura, and of certain elementary mechanical principles. The whole matter, however, was, on Friday evening last, put before the members of the Clinical Society, by their President, Mr. Lister, with such clearness and practicality that we seek no excuse for describing the experiment he referred to. The subject of discussion was pneumothorax, and Mr. Lister said the manner in which he was accustomed to demonstrate to his classes the gravity of the condition was the following: Into the bronchus of a lung obtained from an ordinary butcher, he inserted a glass tube, connecting with this, by means of India-rubber tubing, a hand syringe. Then, with a pair of scissors, he incised the surface of the lung, and on pressing down the piston of the syringe, air passed freely through the wound. On attempting, however, to withdraw the piston, the most considerable force even was found insufficient to do more than just move it, the opening in the lung at once closing and preventing the return of air.

The application of this ingenious and forcible illustration is clear. During life, the lung hangs in a chamber to which air can only enter by abnormal channels. In a condition of pneumotho-

rax such opening is usually produced by a rent (how caused we need not stay to inquire) in the visceral layer of pleura, and we are told on Mr. Lister's authority, that such openings are usually valvular. With every inspiration, then, air will pass from the lung through the opening into the pleural sac, in which, as there is no other mode of exit, it must necessarily be confined. Also, as the wound in the pleura refuses to allow a return current of air through it, the quantity in the chest increases with each breath that is taken, and in this way it is quite easy to understand how the symptoms of pneumothorax may rapidly assume the most urgent character. Treatment by removal of the contained air with a small trocar and cannula produces relief by reducing the pressure set up by the contained gas, but where this is slowly accumulated and long retained it may give rise to most considerable displacement of organs without immediate urgency of symptoms.

Occasionally it happens that cases of pneumothorax undergo spontaneous recovery. Several such were instanced on Friday at the meeting referred to above. But this is a most favourable termination, and is due to the occurrence of some fortuitous events—such as prompt closure of the opening by lymph, and subsequent absorption of the intra-pleural air; or to the fact that the disposition of the lesion permits a *to-and-fro* current of air through it, whereby confinement of the gas is not set up, as proved by a double amphoric sound; or to the efficacy of prompt surgical measures, etc. It is not our intention to dilate on this point now, however; we wish chiefly to reproduce as nearly as possible Mr. Lister's admirable illustration of the meaning of pneumothorax, from a feeling that it may serve to help many others than those whose privilege it is to receive instruction direct from the author.—*Medical News.*

PUERPERAL SEPTICÆMIA, BY DR. J. S. BUCK.—The following case illustrates the value of antiseptically washing out the uterus.—*Medical Times and Gazette.*

Mrs. M., married, aged twenty-eight, a multipara, aborted on Thursday, October 27th, 1881. She was said to be about three months pregnant, and was attended by a village midwife, who stated that "all the membranes came away whole," but that the patient lost a good deal of blood. I was sent for Nov. 1st. On my arrival I found her lying in bed on her back, with her knees drawn up. Her countenance presented that peculiar sallow appearance usually seen in patients suffering from puerperal septicæmia. She appeared in a semi-conscious state. Temperature 104° F.; pulse 138, very small and thready. She had no lochial discharge whatever (this I was informed had ceased on October 31st, the day previous to my seeing her). I ordered her one ounce of brandy every three hours, and gave her a mixture containing five grains of carbonate of ammonia, ten minims of spirits of sulphuric ether, and one ounce of decoction of cinchona every four hours. On November 22nd patient seemed rather weaker, if anything. Temperature 104.4° F.; pulse 140, very small and thready. I continued the same treatment, only ordered the brandy every two hours, and repeated the chloral and bromide draught, as she had not slept. On the 3rd, at 4 a.m., she had an attack of convulsions, which lasted about an hour and a half. On my visit she had a slight yellow discharge, which the nurse said smelt very badly. Temperature 104.4° F.; pulse 138, weak and thready. So I determined to wash out the uterus antiseptically. This I accomplished fairly easily, as I found the os uteri would admit the tips of two fingers nearly. I injected a quart of tepid, weak solution of permanganate of potash, which brought away a quantity of very offensive matter and shreds of membranes. I continued the brandy and ammonia treatment. On the 4th I was surprised to see the change in the patient. She had slept well without medicine. The pain in the abdomen which she complained of the day previous had ceased, her temperature had dropped to 101.6; her pulse was 120, much fuller and stronger, and she had no more convulsions. I determined to give her another intra-uterine injection, which I did with some little difficulty, as I found the os somewhat smaller than on the day previous. I injected the same amount and of the same character, and brought away a few shreds of membrane, but it was not offensive at all. I ordered the brandy every four hours, and continued the ammonia and bark mixture. On the 5th she was much brighter and better. Temperature 101°; pulse 120. She slept well; no pain. I ordered the same treatment. On the 9th the patient was progressing well. Temperature 99.4°; pulse 96. She said she felt well and wanted to get up. I ordered her ten minims of dilute nitric acid and an ounce of the decoction of cinchona three times a day. On the 12th she was out of bed for about an hour. Temperature 90°; pulse 88; going on very well. 21st. Since the last note the patient had improved very much, and she is able to sit up all day. She takes her food well and sleeps well; has no discharge, and her temperature and pulse are normal. I have been giving her ten minims of the solution of dialysed iron three times a day, after food, and ordered her to continue taking it.

I think this case shows the good effects of antiseptically washing out the uterus in such cases. Dr. Playfair, in his "Science and Practice of Midwifery," speaks very highly of the practice, especially in those cases of "autogenetic origin, or self-infection as he terms them; and certainly, in my case, the effect was marvelous.

THE REWARDS OF PROFESSIONAL LABOR.—We have recently allotted special space to the notification of wills left by medical men. It must have already struck those of our readers who have glanced at the figures recorded in this weekly report, that the average value of the property handed down by members of the profession to their families is singularly small. This is, unhappily, the fact. The general practitioner is a hard-working, and too often a struggling man to the end of his days. Comparatively few of the class are able to retire, as the members of other callings retire for rest from their labors, before the relief which death brings to all men. Physicians and surgeons as a rule die in harness. The expenses incurred by those who make specialties of medicine or surgery, or of any one branch of either of these departments of professional work, are necessarily great, while the recompense to the life of labor entailed, looking at the career as a whole, is proportionately small. Even the few who seem to make large incomes during a part of their career seldom amass even moderate competencies. Some five-and-twenty years ago, calculations were made for London and the provinces, and it was estimated that a physician, practising as such in London, did not acquire an income on which he would be required to pay income tax for sixteen years from the commencement, while a physician in the provinces reached the legal figure in eleven years, but not earlier. The differences in favor of the provinces are, of course, due to the fact that no man would think of commencing practice as a pure physician in any city or town, except the capital, unless he had special reason to believe there existed "an opening." We have no means of knowing whether matters have mended with the profession generally during the last quarter of a century, but, looking to the increase of its aggregate numbers in relation to the population, we fear there is not much ground to hope that the rewards of professional labor have been sensibly augmented. The laborer is worthy of his hire, and it is well now and again to look into this matter of money. It will sooner or later be necessary to take it into very serious consideration in relation to the question of fees. Meanwhile, the lesson to be learnt from the story of the wills left by medical men is certainly one of caution and thrift. It is a sad reflection that, speaking generally, the families of medical practitioners are insufficiently provided for, a large proportion being left almost in poverty.—*Lancet, April 8, '82.*

ANÆSTHETICS FROM A MEDICO-LEGAL POINT OF VIEW.—Dr. J. G. Johnson, of Brooklyn, gives the following which has an important bearing on the practical relations of patient and medical attendant :

Anæsthetics do stimulate the sexual functions ; the ano-genital region being the last to give up its sensitiveness. Charges made by females under the influence of an anæsthetic should be received as the testimony of an insane person is. It cannot be rejected, but the *corpus delicti aliunde* rule should be insisted on. Dentists or surgeons who do not protect themselves by having a third person present, do not merit much sympathy.

Deaths from administration of chloroform after a felonious assault, unless the wounding were an unmistakably fatal one, reduces the crime of the prisoner from murder to a felonious assault. The surgeon has no right to use chloroform to detect crime, against the will of the prisoner. But the army surgeon has the right to use chloroform to detect malingerers. The medical expert, notwithstanding he is sent by order of court, has no right to administer an anæsthetic against the wish of the plaintiff in a personal damage suit, to detect fraud. Gross violations of the well-known rules of administerting anæsthetics, life being lost thereby, will subject the violator to a trial on the charge of manslaughter. A surgeon allowing an untrained medical student to administer anæsthetics, life being thereby lost, will subject the surgeon himself to a suit for damages. What he does through his agent he does himself. The physician who administers an anæsthetic should attend to that part of the business and nothing else. He should have examined the heart and lungs beforehand. He should have the patient in the reclining position, with his clothes loose, so as not to interfere with respiration ; should have his rat-tooth forceps, nitrite of amyl and ammonia, and know their uses, and when to use them and how to perform artificial respiration.

In operations on the ano-genital region and the evulsion of the toe-nail, complete loss of sensation in these parts should never be allowed, and no operation on these parts at all should be had under an anæsthetic, unless by the approval of a full consultation who have a knowledge of the dangers. Chloroform cannot be administered by a person who is not an expert, to a person who is asleep without awaking him. Experts themselves, with the utmost care, fail more often than they succeed in chloroforming adults in their sleep.—*Annals of Anatomy and Surgery*, December, 1881.

PUERPERAL EPILEPTIC CONVULSIONS.—Dr. Lucas, of Liverpool, reports the following case in the London *Lancet*, April 8, '82 :—On Dec. 27th, 1881, at 5 a.m., I was called by a midwife to see Mrs. W., who had been some hours in labor (primipara), and had just taken "a fit." When I saw her the convulsions had passed off ; quite sensible ; face somewhat puffed ; os dilatable and head presenting. While passing a catheter she had a violent attack of convulsions ; urine albuminous. I then gave chloroform, and delivered with long for-

ceps; child alive. She had two more fits before delivery. I ordered draughts of chloral hydrate and bromide of potassium, notwithstanding which the fits continued during the day at intervals of one hour and a half. I had arranged so that chloroform was applied whenever a fit came on. Towards evening she lost consciousness. That night she had three fits within the hour, so (at the suggestion of Dr. Charles Hill) I used a subcutaneous injection of a quarter of a grain of morphia (B. P. solution). No fits for seven hours and a half. I then gave a clyster and passed catheter. No fits during the day. I gave another morphia injection (quarter of a grain) that night. No return of convulsions. Recovered her senses gradually, suckled the child, and made a quick recovery.

I am induced to record this case, not having seen reported in the *Lancet* any cases supporting those mentioned by Dr. S. Maberly-Smith in the *Lancet*, July 16th, 1881, page 86. There is no doubt that the hypodermic injection saved this woman's life, and I should certainly try the same treatment in the next case of uncomplicated puerperal epileptic convulsions as soon as possible.

Blister Treatment of Acute Rheumatism.—Dr. Herbert Davies, in pointing out the unsatisfactory results of the salicylate treatment (*Lancet*, Feb. 11th), claims the following advantages for the blister treatment, deduced from the observation of 50 cases at the London Hospital:—

1.—Blisters well and early applied (while fever is high and pain most acute) around every inflamed joint, and followed by large poultices to favor the discharge of large quantities of serum, produce rapid and full alleviation of the pain, reduce the pyrexia quickly, and speedily restore the use of the painful joints.

2.—The bold and free application of blisters around each inflamed joint restrains the tendency of the rheumatic virus to desert the limbs for the heart, thus depriving this disease of its most dreaded result. In the London Hosp. Clin. Report, I find the following statement: "In no case where the heart was sound at admission did any organic lesion subsequently develope itself, and in two cases in which soft but distinct mitral murmur was audible when the patient came under treatment, every trace of the sound rapidly disappeared as soon as a free and abundant serous discharge had been established."

3.—Relapses are slight in intensity and by no means frequent.

4.—The urine loses under this treatment its abnormal acidity without the internal use of any alkaline remedy, becoming often neutral and even alkaline.

5.—The time of the stay of the patients in the hospital was much less than six weeks—the old traditionary remedy for acute rheumatism. The average of my cases was 26 days.—*Maryland Med. Jour.*

Prospects for Cure of Heart Disease.—According to Dr. J. Milner Fothergill, the views of the medical profession as to the prospects for the future of cases of valvular disease of the heart are undergoing very considerable changes, in a direction opposite the hopelessness with which they have been regarded in the past. Not every murmur which may be heard over the heart is a sign that the patient is destined to a sudden death from the action of the cause that produces the sound nor is it always evidence of organic cardiac disease. It is a grave symptom, but its importance may be, and often is, exaggerated. It is only probably produced by deformity in the cardiac valves; but anæmic, aortic, and still more, pulmonary murmurs, are now generally recognized. Dr. Fothergill has cases in his own practice, of mitral murmurs which have existed for sixteen, fourteen, twenty-seven, and thirty-eight years, without developing any very alarming symptoms, and reports the death, between the writing and publication of this article, of a case of aortic regurgitation—a rapidly fatal form of disease—which had not perceptibly advanced during twenty-five years of excessive activity. He also notices cases of aortic obstruction of fourteen, sixteen, and eleven years, of which the first only has as yet died. In conclusion, he observes that under proper treatment, by which the prospects are profoundly affected, and with care, a life of activity is practicable in many cases, provided bodily exertion be avoided, or exercised moderately.—*Popular Science Monthly.*

Quinine in Chronic Cystitis.—In chronic cystitis accompanied by a little fever, ammoniacal urine, and charged with mucus, with frequent desire to micturate, M. Thornton, after emptying the bladder, recommends the injection of at first four ounces of tepid water, which is allowed to run out immediately afterward; then an injection of the third part of the following solution: Quinine, grs. xvi; sulphuric acid, q. s., distilled water, ℥ x. The liquid thus injected is maintained some seconds in the bladder, after which two-thirds are allowed to flow out, while the remainder is left for an hour in the urinary reservoir. This injection produces a very slight smarting, and after a treatment of some days the urine becomes acid and no longer contains mucus.—*Medical Press and Circular.*

A Malpractice suit in Belgium brought against a physician for the alleged improper prescription of morphia, resulted in an acquittal not only, but the plaintiff was adjudged to pay the defendant one thousand francs damages. It is reported that the action was instigated by a rival doctor.—*Kings Co. Proceedings.*

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News

☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.*

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ETHER *VS.* CHLOROFORM.

Considerable discussion has taken place recently in the medical journals relative to the comparative safety of ether and chloroform. So warm has been the discussion in England that a surgeon of eminence has written to the London *Times* in such terms as to lead the public to infer that the surgeon who uses chloroform is wilfully imperilling the patient's life. For many years past medical journals in the United States have characterized deaths from this agent as "unjustifiable homicides, warranting judicial interference." More recently the journals in Great Britain have taken a strong stand against its use in ordinary cases, and advise the substitution of the less dangerous agent, ether. In a late number of the *Boston Med. Journal*, it is asked—Why, if the practice of administering chloroform as an anæsthetic is not opposed and prevented by the medical profession, should not the courts without fear or favor interfere and stop such unjustifiable homicides?

The use of chloroform from its very first introduction, frequently proved fatal. Long before it had come into general use, within ten weeks, indeed, of its discovery as an anæsthetic, it caused the death in England of a girl fifteen years of age. This girl, Hannah Greener, had no other disease than an in-growing toe-nail, and presented no morbid evidences further than those which chloroform itself would produce. Within a month after her death a woman in Cincinnati, aged thirty-five years, died from the effects of its administration; within another month a death occurred from its use in Boston; and about two months afterwards another in Boulogne. From that time until now, a period of about thirty-four years, scarcely a month has passed which did not chronicle a death from the administration of chloroform. Some years ago it was estimated that the proportion of deaths from its use was one in every 2,500 administrations; a very high mortality. The record of deaths was then, in all probability, not perfect, and a careful calculation now would most likely show its use to have been fatal in a yet greater proportion.

It is argued by the advocates of the use of chloroform, that those who die under it, or most of them, were living with their lives hanging on a thread so flimsy that the slightest shock—the loss of a little blood, a little unusual haste, the excitement of passion, would have a fatal effect. It is true there are thousands going about in apparent health, who from some concealed morbid condition are liable to die at any moment from a very slight physical or mental shock. Doubtless many who die under chloroform are of this type; but in many of them the *post-mortem* has revealed no abnormal condition whatever. The same advocates argue that often the quality of the chloroform used is bad; that the mode by which it was administered is at fault; or that the patient was not properly prepared for it. It is also said that sometimes the operation is the cause of death. There is probably a good deal in all this; but we believe nevertheless that the total good attributable to this agent is much more than outweighed by the evils resulting from its use, and we therefore urge the advisability of using that which is held to be a much less dangerous anæsthetic.

It is undoubtedly difficult, if not impossible to settle satisfactorily by actua statistics the question of the relative danger of the use of chloroform and ether; because, although we know about how many deaths occur from the effects of each agent, there are no means of ascertaining the relative proportion of cases in which each had been used. But the recorded opinion of many who, having for a great number of years had experience with chloroform, have also for many years abandoned it in favor of ether, is, that ether properly administered, is a much safer anæsthetic than chloroform. It is also claimed that ether, besides being safer, will produce anæsthesia much sooner than chloroform, by which time is saved, and a patient under the

influence of ether is much more passive, and therefore in a far better condition for an operation than one under chloroform. Besides, ether when administered without food in the stomach, rarely gives rise to troublesome sickness. Both in private and hospital practice in this city for several years past, ether has very largely taken the place of chloroform, and the results have been most satisfactory.

ONTARIO BOARD OF HEALTH.

Several weeks have elapsed since the appointment of the chairman and members of the Ontario Board of Health, but up to the present time no appointment of a secretary has been made. This is to be regretted, as there is much work awaiting the action of the board. It is especially desirable that efforts be made as soon as possible to organize local boards of health in every municipality in the Province, in order that some sanitary work may be done in all the villages before the heated season. Wherefore the delay in the appointment?

We have no desire to dictate in any degree to the Government, even in a matter concerning the public health, but feel it incumbent upon us to say a few words in regard to the appointment. The gentleman who is not only most fairly entitled to the position, but who is also, probably, upon the whole, the most fully qualified to discharge the duties of the office, is, we understand, prepared to accept it, and at once to commence practical work. We need hardly say we allude to Dr. Playter. But for his untiring efforts it is not at all probable there would yet have been any provision for such a board. It was almost entirely through his efforts during the past two or three sessions of the Legislature, that the medical men in the House took such action as led the Government to bring in a measure providing for the establishment of a board. Through his efforts several meetings of members of the profession were held in this city for the purpose of urging the desirability of such a measure upon the Government. He also, for the most part, framed the various resolutions which have been passed from time to time by the medical Associations of the Province and the Dominion, urging this subject upon the attention of the Dominion and Local Governments. All this would not, of course, entitle him to the position were he not considered competent to discharge the duties. But from letters of recommendation we have before us, from leading medical men in the profession and others, we feel certain that the majority of the profession not only consider him quite competent, but regard him as the most competent, on account of the experience he has had in sanitary work. He has given greater consideration and study to the special work which is to engage the attention of the board, than any other man in Canada. He has also had a good deal to do with the vital statistics of the Province, in the Registrar-General's Department for a number of years in connection with the preparation of the annual report, and the general decennial review appended to the last annual report is entirely his work. This is an interesting and valuable report considering the imperfect nature of the materials available. Dr. Playter has written a good deal on public health, and his work has generally been well received, and through his labors he has become known in the United States as well as throughout Canada, as a prominent sanitarian. He has also made some useful investigations into the causes of consumption, one of the most important diseases with which the board will have to deal.

VOLUNTARY POWER OF DISLOCATION.

A short time ago we had an opportunity of witnessing a most remarkable and interesting case of voluntary dislocation. The subject of this wonderful peculiarity is an American acrobat and contortionist named Chas. H. Warren. He visited the various medical colleges in the United States and Canada during the past winter, and exhibited his wonderful powers before the classes. He is at present in London, England, and the London *Lancet*, April 8th, '82, gives the following description of his wonderful powers. A history and careful study of this remarkable case will also be found in Dr. Frank Hamilton's work on "Fractures and Dislocations," 1880, page 807.

"By voluntary muscular contraction he dislocates forwards either or both condyles of the lower jaw, downwards (partially) the head of each humerus, forwards or backwards (partially) each carpus, upwards and backwards (completely) the head of each femur, and backwards and forwards (partially) each of the phalanges of the fingers and thumb. With the aid of his hand he partially dislocates to

either side the carpus, and forwards and outwards the ankle-joint; when the knee is flexed he can rotate the tibia very freely, and make the inner condyle project an inch in front of the femur. Each of these displacements is accompanied by a distinct snap, but the replacement of the bones is noiseless and without effort. The most remarkable, as also the only complete, of these dislocations is that of the hip. He stands at ease with the toes turned further out than is usual, and has unusual freedom of eversion of the lower limbs. When the femur is displaced, the great trochanter is raised and drawn back on the pelvis, and is still very prominent; the limb is shortened and inverted, and knee- and hip-joints are flexed; the head of the bone cannot be felt. The explanation of these facts is that the man's ligaments are unusually lax, while his muscular power is very great, and probably also the rim of the acetabulum is less prominent than usual. In addition, Mr. Warren shows other illustrations of his remarkable power over his muscles, which are of fully as much interest as the foregoing. Thus he can contract at will the two pillars of the fauces, the platysma myoides, and the pectoralis minor, and can fix the elbow-joints by strong contraction of either the arm or forearm muscles, or of both simultaneously. He voluntarily produces the deformity of talipes equinus and talipes equino-varus. Equally interesting is his control over the muscles of the trunk. Thus he can contract his recti abdominis in a wave-like manner, and illustrate capitally the formation of phantom tumors. He can contract his abdominal muscles quite back on the spine, so that the abdominal aorta is seen, as well as easily felt, pulsating. He also expands his chest to an enormous size, and can contract it so completely that the front becomes quite concave. These are merely examples of muscles unusually developed, and brought under the influence of the will to a most remarkable extent; they do not betoken any congenital peculiarity."

DR. HORATIO YATES.

Dr. Yates, of Kingston, Ontario, a notice of whose death appeared in our last issue, has been a resident of that city for upwards of thirty years. He graduated in medicine in the University of Pennsylvania, and received his licence from the Provincial Medical Board in 1842. In 1863 he received the degree of M. D. in Queen's University. He aided in the reorganization of the General Hospital and assisted in the re-establishment of the Medical Faculty of Queen's College. In 1854, he was appointed Professor of Surgery in the Royal College of Physicians and Surgeons, and for several years held the position of surgeon of "A" Battery. He was also a member of the Ontario Medical Council from 1866 to 1869. And thus, one by one, the ancient landmarks pass away, and their places are filled by others. Dr. Yates was in the 61st year of his age at the time of his death. His place will be missed amongst a large circle of friends and relations.

TRINITY MEDICAL SCHOOL, TORONTO.—The following are the names of the successful candidates at the recent examinations in the above school:—

Fellowship Degree.—W. H. Macdonald (Gold Medallist), A. C. Gaviller (1st Silver Medallist), A. D. Smith (2nd Silver Medallist), W. Bonnar, A. Cameron, H. H. Graham, W. Hanbidge, J. M. Johnston, J. Johnston, H. P. McCausland. J. T. Sutherland (Certificates of Honor), R. W. Belt, W. N. Brett, T. W. Duncombe, J. A. Gracy, S. A. Metherell, J. A. Urquhart, J. E. Shore, P. J. Strathy, and J. D. Wilson.

Primary Examination.—J. E. Jenner, E. H. Williams (Scholarship equally divided between them), T. H. Robinson, B. H. Scott (Certificates of Honor), A. L. Brown, W. F. Dickson, P. N. Davy, S. N. Darling, J. L. Davidson, C. E. B. Duncombe, A. G. Elliot, E. Furrer, W. F. Freeman, E. N. Hoople, A. D. Lake, S. W. McConachie, F. H. Sawers. T. C. Cowan, G. J. Charlesworth, A. Hawke, R. Hislop, S. W. Lamoreaux, J. A. McMichael, W. A. Martin, W. Roche, J. Shoults passed on several of the subjects. The Baptie Prize was awarded to E. H. Williams, and a special prize in Materia Medica to B. H. Scott.

First Year's Examination.—H. Leitch, W. M. Brown, J. Saunders, O. Belfry, F. Snellgrove, D. A. R. Jones, J. A. Couch, A. B. Wilson, J. J. Paul, R. Ovens, D. Ovens, H. H. Hawley, E. A. Hall, P. N. Dewar, W. Fierheller, W. J. Chambers, S. A. McKeague, W. Delaporte, T. McCullough J. R. Logan, F. J. Lundy, J. A. Watson, —. Coats-

worth, R. J. Lockhart, S. S. Farrar, A. R. Hanks, J. Rack, W. J. Gunn, W. J. Mitchell, W. S. Harrison, C. Trow, W. E. Spragge, T. H. Mott, A. McKillop, F. C. Hood, W. A. Pepler, J. S. McCullough, A. P. Wade, A. T. Little, J. C. Bell, G. L. Johnston, A. E. Stuart, J. E. Anderson, J. E. Brown, W. A. Wilson, —. Lawton, J. Lindsey, F. H. Johnstone, J. N. Cochrane, —. Salter, J. G. White, J. Ferguson, C. J. McIntyre, A. K. Sturgeon, D. N. Carmichael.

College of Physicians and Surgeons of Ontario.—The professional examinations of the above-named college have just been brought to a close. Eighty-one candidates presented themselves for the licence; of these, 59 were successful, and 22 failed to come up to the required standard. There were 58 candidates up for primary. Of these, 46 passed and 12 were rejected. The following are the names of the successful candidates:

Licentiates.—F. Bentley, L. Bentley, T. G. Brereton, J. Baugh, J. C. Burt, Wm. Bonnar, G. S. Beck, J. F. Bell, E. E. Book, Wm. Brett, E. Bedard, G. W. Clendenan, A. Cameron, G. S. Cleland, A. P. Cornell, R. M. Coulter, W. J. Charlton, L. E. Day, G. C. Dowsley, J. T. Duncan, C. R. Dickson, J. G. Davidson, W. F. Eastwood, Ira A. Freel, R. M. Fisher, A. C. Gaviller, R. W. Garrett, Wm. Gilpin, Wm. Hanbidge, A. J. Henwood, D. A. Johnston, J. M. Johnston, W. H. Johnson, C. E. Jarvis, James Lafferty, J. G. Mennie, T. M. Milroy, M. McPhaden, H. P. McCausland, H. R. McGill, T. F. McMahon, J. T. O'Keefe, L. C. Prevost, S. R. Rogers, D. B. Rutherford, David Rose, B. L. Riordan, H. H. Reeve, T. J. Symington, J. E. Shore, A. D. Smith, Alex. Stark, J. M. Stewart, W. F. Shaw, T. H. Stark, E. D. Vandervoort, R. R. Wallace, A. B. Welford, C. A. Weagant.

Primary.—J. L. Addison, W. G. Anglin, J. Bray, J. W. Clerke, J. Cugan. W. Cuthbertson, W. H. Carleton, D. Campbell, A. P. Cornell, H. R. Casgrain, W. F. Dickson, J. G. Davidson, F. P. Drake, W. F. Freeman, R. N. Fraser, G. A. Graham, J. B. Gullen, J. E. Hausler, R. Hearn, A. J. Henwood, Wm. Jacques, J. M. Johnston, J. F. Kidd, F. D. Kent, L. G. Langstaff, T. D. Meikle, J. Menzies, A. F. McKenzie, S. W. McConachie, A. McMurchy, E. B. O'Reilly, L. C. Prevost, T. H. Robinson, J. W. Ray, W. A. Ross, J. Spence, A. Sangster, W. F. Shaw, Miss Augusta Stowe, F. H. Sawers, A. D. Thompson, A. D. Watson, J. B. Whitely, E. R. Woods, J. D. Wilson, P. C. Walmsley.

Royal College of Physicians and Surgeons, Kingston.—We give below the official announcement of the successful candidates at the recent examinations in the above College. The announcement in our last issue was incomplete.

Final Examination.—R. W. Garrett, D. B. Rutherford, J. M. Stewart, A. P. Cornell, C. E. Jarvis, H. Knox, R. S. Anglin, A. D. Cameron, G. H. Denike, H. N. McDonald, A. A. Mordy and J. T. Reeve.

Third Year.—J. F. Kidd, W. Young, W. G. Anglin, T. A. Moore, A. McMurchy, H. M. Frolland, John Cryan, C. Clancy, Dr. Hickey, L. T. Davis, G. S. McGhie, A. J. Grange, J. Smith and W. Hall.

Second Year.—H. R. Duff, R. N. Fraser, T. Cumberland, A. Forin, W. H. Bullis, E. Foxton, W. J. Webster, R. C. Cartwright, D. H. Mackie, H. J. Williams, H. J. Emery and E. S. Roy.

Amendments to the Quebec Medical Act.—The Special Committee to take into consideration the proposed amendments to the Medical Act for the Province of Quebec, reported in favor of the Bill, Hon. Mr. Lynch in the chair. There were present—Dr. Howard, President of the College of Physicians; Drs. Lemieux and Trudel, Vice-Presidents; Dr. Belleau, Secretary; Dr. Larue, Registrar: Dr. Lachapelle, Treasurer; also Drs. Hingston, Gingras, Larocque, and Larue, of the Medical Board. The present medical tariff for the Province of Quebec was repealed; but the Medical Board have the right reserved them to make a new one. The amendments to the Medical Act proposed by Mr. Mercier were adopted. The Public Health Bill was also discussed, and reported with slight amendments. We are pleased to learn that our friends in Quebec have succeeded in securing a Public Health Bill somewhat similar to the one now in force in Ontario.

Nephrotomy.—The operation of nephrotomy (*Canada Medical Record*) was recently successfully performed by Dr. Roddick, in the Montreal General Hospital. The patient was a girl of twenty years of age, who had been suffering from frequent

and painful micturition, the urine being scanty, muco-purulent and bloody. The urine became gradually more purulent and the patient's health steadily declined. In July last chills and fever set in accompanied by vomiting and diarrhœa, with tenderness over the right kidney. In October a well defined tumor could be felt in the right hypochondrium. The presence of pus in the tumor having been ascertained by the aspirator a transverse incision was made in the loin midway between the last rib and the crest of the ilium, and twenty ounces of putrid pus evacuated and the cavity washed out. The sac was secured to the edges of the wound by silk sutures and a drainage tube inserted. The operation has so far proved a complete success.

Attempted Assassination of Dr. Gray, of Utica, N. Y.—The friends of Dr. Gray, medical superintendent of the N. Y. State Lunatic Asylum and editor of the *American Journal of Insanity*, will regret to hear that he has been shot at and severely wounded by an intending assassin. The man, whose name is Renshaw, an old soldier, shot at him through the window of his study, the ball entering at the external angle of the right eye and escaping through the middle of the left cheek. The intending assassin is not known as a lunatic, but had some real or supposed grievance. Dr. Gray had no bad symptoms, and has almost entirely recovered.

Prevention and Treatment of Post Partum Hemorrhage.—Dr. T. More Madden (*International Med. Congress*), advises a course of iron during the last months of pregnancy as a prophylactic measure. Speaking of the various modern methods of arresting flooding, he says, that the injection of hot water is a very uncertain method, except where there is great depression and other remedies have failed. Ice water has the same failings. The injection of a strong solution of perchloride of iron is too apt to give rise to metro-peritonitis. He, however, speaks highly of applying the iron solution on a sponge which is held in the hand, and both inserted into the uterus, and held there until the contractions force them out together.

Banning Truss and Brace Co.—The instruments and appliances manufactured by the above firm have been found, after years of faithful trial and experiment to be surpassed by none in the market. They make a specialty of spinal braces, and no other house can compete with them in this line of manufacture. The instruments are light, easily adjusted, comfortable to the wearer and what is of most consequence, thoroughly efficacious. Their trusses are also superior in make, light and durable in character. Physicians requiring anything in their line will do well to correspond with the firm, under the assurance that every attention will be paid to their requirements.

The Pathology of Malaria.—Dr. M. A. Laveran (*London Lancet*) has found in the blood of malarial patients very definite and remarkable parasites. They are of different shapes, some being curved, cylindrical bodies, with pointed extremities, with pigment granules in the centre, making a dark spot. Others are spherical and about the size of blood corpuscles, also containing pigment. Fine filaments could be traced on these bodies about three times the length of a red corpuscle. The first, or cylindrical corpuscle had no motion; the spherical, however, owing to the filaments, had an oscillating movement.

Is Salicylic Acid a Specific for Rheumatism?—Dr. Lewis Shafter, Physician to the Devon and Exeter Hospitals (*Brit. Med. Jour.*), commenting upon the value of salicylic acid in the cure of rheumatism, is unwilling to admit its specific properties. But Dr. Wm. Strange, of the Worcester General Infirmary, writing in the same issue of the journal, after an extended experience with this drug, is confident in his statements that in the same sense as quinine acts as a specific in malaria, or mercury and iodide of potassium in syphilis, so salicylic acid, but more especially its compound, the salicylate of soda, acts as a specific in acute articular rheumatism, by neutralizing the poisonous elements of the blood.

Treatment of Chronic Eczema.—The *Chic Med. Review* gives the following:—Avoid the use of soap, as this is irritating. Twice a day, bathe the part in an aqueous solution of borax, one ounce to the pint. Dry without friction and freely apply the benzoated zinc ointment, then bandage the part firmly with old dry muslin which has been previously wet with a saturated aqueous solution of

borax. Over this apply a bandage of oiled silk in such a manner as to exclude the air perfectly. Let the bowels be kept regular. In the majority of cases eczema can be promptly cured by the simple exclusion of air. Eczema of the fingers will generally yield by the ordinary rubber cot.

Bishop's Medical College, Montreal.—The following are the names of the successful candidates in this University: Degree of M.D.C.M.—H. Bishop (Wood Gold Medallist); N. C. Smilie (Chancellor's prize); J. W. Cameron (First-class honors); W. D. M. Bell, and G. M. Balcom (Second-class honors) W. Prendergast.

Primary,—J. B. Saunders (David Schlorship); J. A. Caswell (First-class honors); G. A. Balcom and E. Sirois (Second-class honors); W. D. M. Bell, W. Prendergast.

Peritoneal Transfusion—The *Medical News*, Philadelphia, states that three cases are reported of injections of defibrinated blood into the peritoneal cavity, one death and two recoveries. From two to six ounces of blood were used at each injection. Mosler, of Greifswald, had the fatal case, and claims death to have taken place from repetition of the transfusion. In the lower animals there seems to be no danger whatever. The method is to defibrinate fresh blood, heat it to normal temperature, introduce a trocar and inject. The instrument should be warmed.

Papoma.—This new and valuable preparation of food for infants has now been before the profession for some time, and wherever it has been tried it has given entire satisfaction. The name of the manufacturer is a sufficient guarantee as to the purity and excellence of the quality of the article. Our own experience of its use bears out the almost universal testimony in its favor. It is easily digested, readily assimilated, and does not produce gastric disturbance or flatulence. It is a valuable addition to the diet of the nursery.

Antidote for Strychnine. — The *British Medical Journal* of March 11, 1882, stated that Messrs. Greville, Williams & Waters of the Royal Society have discovered an antidote for strychnine. The substance is named *lutidine*, and is obtained by distilling cinchonine with caustic potash. The efficacy of the remedy has been tested by experiments on frogs. The results of the experiments are most promising and lend encouragement to the hope that, at last, a reliable antidote has been discovered.

Dangers of Anæsthesia.—Speaking in reference to the danger of using pure chloroform for anæsthetic purposes, Dr. Henry Smith says (London *Lancet*), "During the last five years, both in private and hospital practice, the anæsthetic employed in my operations consists either of ether alone, or of the mixture composed of one part alcohol, two of chloroform, and three of ether. This mixture is comparatively harmless, and will produce the same amount of insensibility as is effected by more dangerous anæsthetics."

Test for Glucose in the Urine.—Dr. L. S. Oppenheimer gives (*Louisville Medical News*) a modification of Prof. Haines test for glucose in the urine. One or two drops of glycerine are dropped into a test tube. A few drops of an aqueous copper sulphate solution are added, then about five or six times this quantity of liquor potassa is poured in and the whole boiled. The urine is then dropped in, and if sugar be present the yellow or reddish color will suddenly appear.

Warner's Sugar-Coated Pills.—Messrs. W. Warner & Co. are known the world over for their thoroughly reliable and valuable sugar-coated pills. We have been using their different preparations with the utmost satisfaction, and have much pleasure in recommending them to the profession. Our acquaintance with this firm, and our personal knowledge of the care bestowed in the manufacture of their preparations fully warrant us in the above statements. Their sugar-coated pills have always received the highest awards at all the great international exhibitions at home and abroad.

Appointments.—Dr. K. N. Fenwick, Prof. of Physiology in the Royal College of Physicians and Surgeons, Kingston, has been appointed physician to Kingston General Hospital, vacated by the death of Dr. Yates.

As we go to press we learn that P. H. Bryce, M.A., M.D., of Guelph, has been appointed Secretary of the Ontario Board of Health.

TORONTO MEDICAL SOCIETY.

Feb. 9th, 1882, the Society met at 8.15 p.m., the President in the chair; the minutes of last meeting were read and adopted.

Dr. Workman then gave notice that three months hence he would move that the annual fee for membership of the Society be reduced from $3 to $2.

Dr. Graham exhibited two vesical calculi removed at a p. m. examination from a lad aged seventeen; the larger one was firmly fixed, and encysted below the pulbic arch, and was taken for an exostosis. The same gentleman also showed a left lung and aorta; the aorta was aneurismal and had ruptured into the pleural cavity; the patient from whom the specimen was taken also suffered from pleurisy with effusion. The patient's voice was hoarse, due to pressure on the recurrent laryngeal by the aneurism.

Dr. Burns showed a young man aged nineteen, with hypertrophic enlargement of the ulnæ and tibiæ. No clue could be got to the disease from the family history. No evidence of syphilis except slight protrusion of the frontal eminences, and the bridge of the nose being sunken.

Dr. Wilson showed a fœtus with an abscess in the left thigh, with arrest of developement in the affected limb.

Dr. Nevitt then showed a ruptured uterus; the child's body and part of the placenta had escaped through the rent into the abdominal cavity. No decided cause could be given for the accident. A microscopic examination showed fatty degeneration and inflammatory infiltration. The rent extended through part of the placental attachment.

Dr. Oldright showed a large tumor, which at first was thought to be fatty, but on microscopic examination it was found to be a lympho-sarcoma in structure; it was removed from the upper part of the thigh, situated beneath the adductor longus. Weight, 4½ lbs.

Dr. Cameron then showed a case of palmar squamo-pustular syphilide. No history of syphilis was obtainable, but the patient improved greatly under a mixture containing the perchloride of mercury and the iodide of potassium. The case also showed serpiginous eczema on the extensor surfaces of the arms.

Dr. McPhedran related a case in which there was loss of power of the lower extremities after confinement. He could assign no cause for the malady.

Dr. Temple mentioned a similar case, which, after some months quite regained the use of her limbs, no special treatment being adopted.

The President then vacated the chair, and read a short paper upon "The difference between acute delirium and insane delirium." After a few preliminary remarks, he described the different effect alcohol had upon different persons and gave a vivid description of individual cases. He also gave a description of the mania of hysteria and delirium tremens, and concluded his paper by giving the points in the differential diagnosis between acute and insane delirium. The Society then adjourned.

February 23rd, 1882.—The Society met at 8.30, Dr. Graham in the chair. The minutes of the last meeting were read and adopted.

Dr. Davidson then exhibited a placenta which had been adherent to the uterine wall throughout nearly its whole extent. Masses of fibrinous lymph were to be seen on its surface, and in order to remove the placenta it was necessary to introduce the whole hand into the uterine cavity. A discussion then ensued as to the merits and demerits of introducing the hand into the uterus to remove adherent placenta.

Dr. Riddel showed the head of an aged man, whose widow was committed for trial on a charge of murdering him, on the medical evidence given at the inquest, which stated that the right temporal bone had been fractured, the result of several blows from some blunt instrument. On a close examination of the skull by Dr. Riddel, it was found that there was no fracture of the right temporal bone, but that a small fragment of the parietal bone was wanting, which must have been fractured at the time that the calvarium was removed by the operator, which, had it been fractured before the p. m., would have crumbled away or been detached from the dura mater by the action of the saw. Dr. Riddel also found a fracture of the left parietal, frontal and occipital bones, which must have been produced by the unskilful removal of the skull cap. At the trial of the supposed murderess Dr. Riddel was called for the defence, and gave his evidence in accordance with what he found, as above stated, upon which, and together with similar evidence by Dr. W. T. Aikins, the woman was acquitted.

Dr. Oldright then made some observations as to the condition of the prepuce in early

boyhood. He thought it was a very common thing to find the prepuce contracted in children, and that needless operations were often performed. He thought that as age advanced, the condition generally righted itself. A discussion ensued upon the subject, and several cases were cited where reflex symptoms were cured by the removal of the prepuce.

A communication from Dr. Hillary, of Annotto Bay, Jamaica, was then read, regarding an autopsy in which air was found in the right auricle of the heart and in the gall bladder, and there was also general emphysema. The patient had died suddenly. The Society then adjourned.

Books and Pamphlets.

1st. A Handbook of Uterine Therapeutics, and of Diseases of Women. By Edward John Tilt, M.D. Fourth edition.

2nd. A Treatise on Diseases of the Eye. By Henry D. Noyes, M.D., A.M.

3rd. Lectures on Diseases of Children. By Edward Henoch, of Berlin.

It is now a long time since the Preacher said, "Of making many books there is no end." He very truly added, "Much study is a weariness of the flesh." In his days the printing press had not even become a subject of prophecy. What would he think, were he now to revisit our planet, of the overwhelming profusion of ever-multiplying issues of new books, of all sorts and sizes, which threaten, not merely to weary the flesh, but actually to wear every vestige of it off the bones of those who strive to keep within the domain of modern bibliolatry? These reflections are forced upon us by the sight of only half-a-dozen of the numerous volumes submitted to our criticism by the enterprising publishers of New York and Philadelphia, among whom it might go without saying that the house of Wm. Wood & Co. still persist in occupying the first rank, and accordingly we have to acknowledge our obligations for the above valuable publications.

The Popular Science Monthly for May, 1882. New York: D. Appleton & Company. Fifty cents per number, $5 per year.

The contents of the May number are varied and substantial, without being striking or exceptional. "The Methods and Profit of Tree Planting," by N. H. Egleston, is an interesting article devoted to the remedy, practical benefits and rules of successful tree-culture. Herbert Spencer, in a short article, gives his estimate, which is not very high, of "Goldwin Smith as a critic." Dr. Rutherford speculates on the causes, and offers a new theory on the "Diffusion of Odors." R. W. Lovett discourses on "The Development of the Senses," and Dr. Bachelor gives some information on "The Tree that bears Quinine." There is a full and very entertaining "Sketch of Sir John Lubbock," besides many other interesting articles, and an unusual budget of miscellaneous matter at the close of the number.

The Opium Habit and Alcoholism, by Fred. H. Hubbard; published by A. S. Barnes & Co., New York.

This "*unus e pluribus*" contribution to the therapeutics of inebriety will be much prized by all those who desire to enrich their libraries with books which tend to enhance the reputation of the possessor. By far the greater part of it is given to the exposition, by illustrative cases, of the treatment pursued by the author, which, no doubt, was attended with that uniform success which proves an irresistible stimulus to all earnest philanthropists. The field of practical utility is ample enough to warrant the hope that this work will be largely sought after.

Suppression of Urine—Clinical Descriptions and Analysis of Symptoms, by E. P. Fowler, M.D., with 39 clinical cases, etc.

This little volume commends itself by its brevity, and perhaps the colored plate in the front will contribute not a little to its attractiveness, though the multitude of tabular expositions which must have cost the compiler a great amount of labor, will hardly be dwelt upon by the reader with that interest and patience which the zeal and industry of the author should command.

Births, Marriages and Deaths.

On the 13th ult., Dr. Munro, St. Denis Street, Montreal, aged 75 years.

On the 19th ult., Frederick H. Wright, M.D., etc., son of Dr. H. H. Wright, Toronto, aged 30 years.

On the 15th ult., Dr. H. Bingham, of Manilla, Ont., aged 56 years.

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Original Communications.

FORWARD DISPLACEMENTS OF THE UTERUS.*

BY J. W. ROSEBRUGH, M.D., HAMILTON, ONT.

That forward displacements of the uterus are frequently met with in practice, and at the same time found difficult to treat satisfactorily is proven, I believe, by the numerous and ingenious attempts made from time to time to devise a suitable and efficient anteflexion pessary. That no instrument yet brought forward has met with general approval and acceptance may be partly accounted for by the fact that it is exceedingly difficult to devise a pessary capable of elevating and maintaining the pelvic organs in their normal positions, without at the same time causing an undue pressure on some parts sufficient to become irritating and uncomfortable. Another reason may be found in the fact that other troubles, such as prolapse of the vagina, and prolapse of the bladder, frequently combine to complicate the displacement of the uterus, and a pessary that does not meet all the requirements of the case must prove inefficient.

If more care were taken in investigating all the symptoms complained of in these forward displacements, as well as in the indications for treatment, more satisfactory results could be obtained by the use of a suitable ante-version pessary. In investigating ante-version symptoms let it be remembered that the vagina is not, as generally described, a circular canal. It has an anterior and posterior surface, triangular in shape, lying in close apposition to each other. It has no side walls, but the anterior and posterior surfaces, which are traversed by numerous rugosities, lie in perfect contact, closing the passage when not separated by some foreign body. The uterus is not a continuation of the vagina in the curve of the pelvis, but sits fixed in the anterior wall near its upper end, the vaginal portion protruding through almost at right angles for half or three quarters of an inch, frequently impinging upon the posterior wall.

The posterior vaginal wall is supported, and made to curve forward in the anterior half of its length by the wedge shaped perineal body while the posterior portion having no such support is depressed towards the rectum into an oblong spoon-shaped pouch. The anterior vaginal wall, triangular in shape, having no firm attachments, settles down and presses accurately against the lower portion of the posterior wall, while the vaginal portion of the uterus presses down in the pouch behind the perineal body, impinging upon the rectum. This is the normal condition. So long as the pelvic organs remain in a comparatively healthy state the ligaments and natural supports are usually sufficient to maintain them in their proper positions, or with only slight depression, but in delicate females, and especially those subjected to leucorrhœa and other weakening influences the vaginal walls become relaxed and readily yield to the weight of the uterus and superincumbent viscera forced down by intra-abdominal pressure.

The uterus, bladder, or anything which presses upon the vault of the vagina may so force down the anterior wall as to produce a crumpling and partial inversion of the canal into itself, like the finger of a glove. The anterior wall first receiving the weight and pressure yields sooner and more than the posterior wall, and always in the direction of the least resistance. The pressure and weight continuing to force down the anterior wall upon the posterior, it also yields and becomes somewhat displaced downward, and thus the condition becomes abnormal or pathological. Then the anterior wall, relaxed, and lubricated by the leucorrhœal discharge, slides further and further down off the posterior wall until there is complete descent and prolapsus.

The several stages in the descent are in some cases accomplished in a few months, though generally years are necessary. But it is important to keep in mind that at first it is a slight depression only, below the normal condition in the individual which is the starting point; and this should not be overlooked, whenever the patient complains of heavy bearing-down pains referable to the inguinal,

* Read before the Ontario Med, Association in June, 1881.

hypogastric, and pubic regions accompanied by aching in the back and irritability of the bladder an examination will generally reveal a yielding of the anterior vaginal wall with displacement of the uterus and cystocele. To fully appreciate the extent and importance of these displacements, the patient should be examined in the erect posture, for many of them may entirely disappear in the recumbent position. The patient suffering from this trouble is made very miserable. She complains of great misery in and about the regions above mentioned, accompanied by considerable lassitude and weakness. She has a constant sense of a vague, dull, heavy, aching, bearing-down pain, and a feeling that something must come away. The pain is not acute, nor located in any particular spot, but appears to radiate from the pelvis as a centre in various directions. There is an entire absence of sexual desire, and intercourse is painful, repulsive and shunned; or tolerated only with loathsome submission. In addition to great weakness the power of locomotion is so impaired that walking exercise is abandoned and all employment relinquished; and, thus, the patient, if not relieved, sinks into helpless invalidism and in time becomes bedridden. In these displacements the equilibrium in the circulation is lost. The veins are obstructed and unable to convey the blood away as fast as it is thrown in by the arteries; hence the uterus becomes congested, heavy, and enlarged. The vagina being relaxed the heavy organ descends and soon becomes somewhat prolapsed. It then drags upon the vesico-vaginal septum, producing irritation of the bladder and cystocele. As the uterus continues to settle in the pelvis the circulation in the vagina and surrounding structures is more and more obstructed. The vascular plexuses in the connective tissue in the ordinary state, are remarkable for their enormous development, but in prolapse of the pelvic organs, as well as in pregnancy they become turgescent and varicose, and have an almost incredible nervous capacity.

In seeking to understand the cause of pain in these displacements, it should be remembered that a dense network of nerves is spread over the uterus, bladder and rectum, and that every ligament, even the smallest attached to these parts contains muscular fibres and nerves. The displaced uterus drags upon some parts and causes pressure upon other parts exciting reflex irritation. The nervous centres become extremely susceptible to the exhausting influences of pain and their tone is being constantly worn down. Then all the other organs, especially those concerned in digestion and assimilation perform their functions imperfectly. This condition is well described by Barnes.

In some cases the mal-nutrition and semi-starved condition induced by the dyspeptic symptoms are associated with a nervous irritability and mental aberration bordering on insanity.

This brief and imperfect description of the lamentable condition in which patients suffering from these displacements are frequently found, is not fanciful nor overdrawn. It therefore behoves every practitioner to carefully and thoroughly investigate the symptoms and cause of distress in these cases, and to resort to every means within his power to alleviate the discomfort and speedily restore the sufferer to health and usefulness.

Treatment—In the treatment of these cases the first step to be taken should be the reposition of the diseased organ, and retaining it in place by means of a suitable, effectual and comfortable fitting pessary. This I believe is the proper starting point, and in my experience the pessary does not come in contact with the diseased os uteri—indeed it assists to make a pouch in which the inflamed part rests and is prevented from chafing against the posterior wall of the vagina. Having restored the uterus to its normal position and bolstered it up so as to retain it in place, the suitable local and constitutional treatment can be instituted; and under their combined use a cure can generally be effected.

In the constitutional treatment we must resort to remedies which improve the general health and strength of the patient, and tend to increase the quantity and improve the quality of the blood. We must direct our attention to the stomach and digestive organs; for in these cases a permanent cure can only be effected by invigorating the system and hardening the tissues by means of good nutrition. If the diet has been too poor we must improve it before we can expect any change. We cannot here enter into a discussion concerning the various forms of dyspepsia, constipation, nervous irritation and prostration, and other frequently associated affections complicating uterine disease. The successful practitioner must have a clear knowledge of

these associated conditions and treat them intelligently, according to the indications in each case.

The Pessary—The most efficient anteversion pessary is one that accomplishes a double purpose—one that will fit the natural shape of the vagina, and keep the passage straightened out so that it cannot become "crumpled" down by the descent of an enlarged or heavy uterus, and also hold or push the anteverted organ upward and backward without stretching the vagina. The first object is very satisfactorily accomplished by the Hodge, as modified by Albert Smith, which is nicely adapted to the normal shape of the vagina, but the second object is beset with difficulties, and much ingenuity has been displayed in devising an efficient instrument for the purpose. The attachment to the Smith, invented by Prof. Thomas was a step in the right direction, but no instrument yet brought forward has met with general acceptance.

Having myself experienced considerable difficulty in getting an instrument able to give any relief in anteversion and anteflexion cases, I have devised two different spring pessaries which have afforded surprising comfort to those wearing them. The anteversion pessary consists of a Smith-Hodge instrument, as a foundation, to which is attached, by means of a spring on either side, a cross-bar which passes in front of the uterus, at the vaginal junction, and presses the organ upwards and backwards. The Smith-Hodge part I have found a very comfortable shape for keeping the vagina straightened out, while at the same time making an admirable foundation for the attachment of the spring, which can be made weak or strong according to the requirements of the case in hand. This spring pessary will, I am confident, be found sufficient for nearly all cases of both ante-version and anteflexion, especially when the latter has been previously straightened and converted, as it always should be, into an ante-version. But occasionally we meet with rebellious cases, and those complicated with prolapse of the anterior vaginal wall and bladder, which also must be supported and pushed upwards; and for such cases I have devised a still more comfortable and simple instrument. This, ante-flexion pessary, consists of two parts fastened together by a light spring; the instrument, as a whole, resembling in general shape the Albert Smith. The first part is a crescent shaped Hodge narrowed at the front end to fit the vagina above the perineal body; the other part is shaped like the front two-thirds of a Smith, having a concave cross-bar looking towards and pressing against the anterior surface of the uterus. The curved point of the Smith projects an inch in front of the Hodge, and the other end overrides it an inch backwards; this part is forced upwards by the spring, lifting and supporting the bladder and anterior vaginal wall, while at the same time pushing the uterus backward into its normal position.

QUARTERLY REPORT ON THE PROGRESSS OF MEDICAL SCIENCE.

BY J. STEWART, M.D., ETC., BRUCEFIELD, ONT.

THE BACILLUS OF TUBERCULOSIS.

Although Cohnheim, in the last edition of his lectures on general pathology brought forward a great array of facts which went to prove the infective character of tuberculosis, he was compelled to admit that up to the present, the virus had escaped attention. This great question is now forever set at rest by the discovery by Koch of Berlin of the true micro-organism which induces tubercular diseases. In order to see the bacilli of tubercular tissues, these have to undergo a special preparation. After the tissue or fluid is dried and warmed on a slide, it is placed for twenty-four hours in a colouring solution of 1 c. c. of methyline-blue in a 1-5 of c. c. of a potash solution diluted in 200 c. c. of water. It is then immersed in a concentrated watery solution of vesuvin which has the effect of depriving all the tissue elements of the blue color communicated to them by the methyline-blue, and leaving the bacilli of a beautiful blue. The tissues are changed from a blue to a brown by the action of the vesuvin. According to Koch's experience all bacilli are changed from a blue to a brown when vesuvin is added, except those of leprosy and tuberculosis. The tubercle bacilli are rod shaped and vary in length from a quarter to half the diameter of a red blood corpuscle. In size and shape they present a striking resemblance to the leprosy bacilli. They are more slender and pointed however. They are found most abundantly where the tubercular process is most rapid and recent. Koch found them always present in tubercular formations except in a few instances, and then only when the disease was arrested. If giant cells are present in

the tuberculous tissues the bacilli are sure to be found within them, and should the process be very chronic, they may only be found in these situations. In eleven cases of human miliary tuberculosis, the bacilli were found in the tubercles present in the lungs in every case, also in those infiltrating the spleen, liver, kidneys and the gray granulations of the pia mater. In twelve cases of caseous broncho-pneumonia the bacilli could only be found in small groups at the edge of the tubercle. They were found very abundant in cavities. In large cavities they are found present with other bacterial forms from which they are distinguished by their different behaviour on the addition of vesuvin. In ten cases of bovine tuberculosis where there were calcified nodules in the peritoneum and lungs they were present. In three monkeys who died from spontaneous general tuberculosis, they were found in the miliary nodules present in the lungs, liver, spleen and lymphatic glands. Koch inoculated 172 guinea-pigs, 32 rabbits and 5 cats with various tubercular substances; gray and cheesy tubercle from the human lung, sputum of phthisical patients, tubercle masses from spontaneous tubercular monkeys, guinea-pigs, and rabbits, from the calcified and caseous lung tissues of cattle infected with bovine tuberculosis. In not a single instance were bacilli absent from the lungs. In order to ascertain whether these organisms are the true cause of tuberculosis or not Koch, performed a large number of culture experiments, using sterilised blood-serum from the ox as his cultivating fluid. If to this fluid be added a small quantity of fresh miliary tubercle, (taking care at the same time to prevent the entrance of any other organism) and then kept at a temp. of 100° Fah. for 10 days, fine white points make their appearance on the surface of the serum. Fresh glasses can be inoculated from this the first culture. Under the microscope the greyish white masses on the surface of the serum are found to correspond exactly to the bacilli in tubercular masses. If a small quantity of the infected fluid be injected into the anterior chamber of the eye or under the skin of an animal or directly into its blood, there results a general tuberculosis which runs a much more rapid course than when the injection is made with ordinary tuberculous material. The first symptoms in guinea-pigs make their appearance in about ten days after the inoculation. Cats and dogs which ordinarily enjoy an almost complete immunity from tuberculosis are quickly and surely affected.

The parasitic nature of tuberculosis being thus fully established, there remains to be answered; from where do the organisms come, and how do they get into the body? From a series of experiments it was determined that tubercle bacilli only develop at a temp. of from 30° to 41° C. Exposure to a temp. of under 30° and over 42° C. had no effect whatever on them. They differ in this respect markedly from the bacilli of splenic fever which develop readily at low temperatures. It follows from the above experiments that the bacilli of tuberculosis are incapable of development outside of the body. It is very probable that these organisms find their entrance into the system with the inspired air. When it is remembered how numerous they are in cavities it is not at all surprising that the outside air is contaminated with them. Koch found them present in about half the cases of phthisical sputa that he examined. The sputum of patients not suffering from phthisis gave negative results. The bacilli holding sputa when inoculated as surely induces tuberculosis as a piece of miliary tubercle. Even, when the sputum is thoroughly dried it retains its virulence. Koch induced general tuberculosis in four guinea-pigs by the injection of sputum which had been in a dried condition for eight weeks.

The growth of tubercle bacilli is very slow, and for this reason, in order to infect an animal with certainty it is necessary to introduce the virus into the peritoneal cavity, subcutaneous tissues or the anterior chamber of the eye. Infection from the surface of a wound or from the cornea, is very exceptional. This is the reason why persons are not infected who having cuts on their hands make post mortem examinations of patients who have died from phthisis. The two great sources of tuberculosis are (1) from the sputum, clothes, &c., of the infected person; (2) from the lower animals. According to veterinary surgeons tuberculosis of the mammary glands of cows is not at all rare. In cases of this kind there would be direct admixture of the milk and the tubercle bacilli.

These admirable researches of Koch had not been a week published before they were confirmed by another eminent worker in the same field of pathology—Baumgarten of Königsberg. A short time previous he discovered similar organisms in the tubercular tissues of guinea-pigs.

THE PATHOLOGY OF PNEUMONIA.

Ever since the discovery by V. Recklinghausen and Lukomsky of a micro-organism in erysipelas, observers have been at work trying to find a similar cause for croupous pneumonia. The similarity between the two diseases led Klebs to investigate this matter. He discovered spherical monads in the secretion of the bronchial tubes and in the fluid of the central ventricles in a case of croupous pneumonia. Eberth found, in a case of suppurative meningitis, complicated with pneumonia, micrococci in the pulmonary exudation, and also in the inflamed pleura and pia mater. Koch, in a case of acute pneumonia following relapsing fever, found similar organisms in the alveolar exudation and in the capillaries of the lungs and kidneys. The latest investigator in this department of pathology is Friedlaender, of Berlin, who has investigated eight cases of acute genuine pneumonia, and in every case with a successful result. The search was made in the fibrinous effusion of the bronchial tubes and in hardened sections of the lungs and pleura.

The micro-organisms found were almost constantly of similar size and form, ellipsoidal micrococci, almost a micro-millimeter in length and one-third less in breadth. They were generally found in pairs, and sometimes in long chains. Within a single alveolus thousands of them can be seen during the stage of red hepatization. During the stage of grey hepatization they are not so numerous. In the majority of the cases they were not discovered in the alveolar or bronchial walls. In one case (a typical one), a very large number of them were found in the lymph spaces of the interstitial connective tissue and in the endothelium of the lymphatic vessels. The lymphatics appeared to the naked eye as silvery threads. The presence of colonies of micrococci in the lymphatic vessels is, according to Friedlaender, of great significance, as it demonstrates that these micro-organisms can pass into the current of the circulation and develop in the living tissues.

In answer to the question, Are these organisms the cause of the pneumonia? Friedlaender observes that anatomical investigations cannot alone give a certain answer. That pneumonia is caused in this way is favored by the above considerations and the analogy between it and other acute infectious diseases. Its frequent occurrence as the result of cold ("Erkältungspneumonie") constitutes a difficulty in accepting this theory of its causation.

It is, therefore, as yet unknown whether this micro-organism is a primary formation or a result of the inflammatory process in the lung.

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LACERATION OF THE PERINEUM, INVOLVING THE SPHINCTER AND THE RECTO-VAGINAL SEPTUM — OPERATION.

BY N. WASHINGTON, M.D., ORANGEVILLE ONT.

The case I am about to describe came under my notice on the 23rd of October, 1881, during her confinement. Mrs. C., æt. 32; healthy during the greater part of her life until she met with the above mishap, which occurred during her first delivery with instruments. She has been confined three times since then, at full term; children all living. During her last confinement, on examination, I found to my great surprise an extensive laceration. The rent involved the sphincter ani and extended up the recto-vaginal septum about 1½ inches. On making due inquiry, I found that she had suffered this infirmity for over nine years, unable to control the action of the bowels in the retention of the fæces or the escape of flatus. This state of things necessitated close confinement, in fact almost absolute seclusion from society. This, in connection with the inexpressible abhorrence and loathsomeness of herself, produced a careworn look, and very materially affected her health. Under these distressing circumstances she very willingly consented to an operation. This was hastened by the period of lactation, after this confinement, being much shorter than usual. Therefore on the 1st of February, 1882, assisted by Dr. Carbert, who carefully administered the anæsthetic, which consisted of chloroform, the operation was commenced. The day before, necessary arrangements had been made by the administration of a tablespoonful of

castor-oil, which acted freely, and on the following morning one grain of opium in powder. Prior to the administration of chloroform, an ounce of brandy in some water was given, a practice I would recommend to every practitioner before the administration of any anæsthetic. The patient being fully under the influence of chloroform and the bladder emptied, the operation was commenced by removing the hair in close proximity to the laceration. With a pair of scissors curved on the flat and a scalpel, I carefully dissected a thin film from the margins of the rent in the recto-vaginal septum, then by cautious dissection with the scalpel and occasionally with the scissors, from below upwards, I denuded the lacerated surfaces. This I found to be somewhat tedious, owing to the uneven surfaces, which were full of elevations and depressions as if considerable sloughing had taken place at the time of the laceration. The operation was also somewhat hindered by free oozing of venous blood which was occasionally very profuse, owing no doubt to the fact that the parts are very largely supplied with valveless veins. The occasional spirting of a little arterial twig, also delayed the operation slightly, but was readily controlled by torsion, in the absence of "serrefines," which I greatly prefer. Having thoroughly prepared the surface, I then proceeded to close the wound or rent by means of a curved perineum needle (curved at right-angles to the holder or handle), using a carbolized catgut ligature in the recto-vaginal septum. The next ligature was introduced so as to embrace the lacerated sphincter muscle, being introduced by a curved perineum needle (curved parallel with the handle). It was introduced on a level with the lower margin of the anus, and about half-an-inch to the left of it, and carried backwards and upwards so as to embrace the posterior wall of the vagina. From this point the needle—armed of course with silver-wire—was returned to the opposite side and made to emerge at a corresponding point to its introduction. The remaining sutures, three in number, were passed in the same arched direction, each suture rising about half-an-inch or possibly a little more above the preceding, and the last one including a portion of undenuded mucous membrane of the posterior wall of the vagina. The ends of the sutures were clamped with number two perforated shot. The sutures arched in this manner, including so much tissue, serve two purposes, first, that of giving greater firmness to the hold of the ligatures, and secondly, aiding very materially in checking hæmorrhage, which occasionally is very troublesome. I introduced the catheter again to draw away any residuum of urine, and after tying the knees together in the usual manner the patient was removed to bed, and one grain of powdered opium given to allay the irritation.

The after treatment consisted in carefully watching the patient and attending to any little irregularity that might occur. One grain of opium was given every four, six or eight hours, as the symptoms demanded. The urine was removed twice every twenty-four hours, and this was very much facilitated by attaching a piece of rubber tubing to the end of the catheter. The diet was principally milk, eggs or the white of egg, beef tea, toast, biscuit, etc. The greatest difficulty in the after treatment was chiefly due to the collection of gases in the intestines, not only to the very great annoyance of the patient in giving rise to pain and producing a false alarm, but to me also in removing or causing a free exit, which was best facilitated by the introduction of a male gum-elastic catheter, and allowing it to remain *in situ*. At the expiration of eight days I injected four ounces of olive oil and allowed it to remain six hours. I then gave a dose of oleum ricini, followed in a few hours by a soap-and-water enema. This was of no avail whatever. The rectum was distended with hardened fæces which no oil could penetrate. After laboring a considerable time without effect and gastric trouble setting in, I concluded to remove the fæces. Next day I took out some of the upper stitches and found that union had taken place perfectly, with the exception of a small place included between the upper two stitches. The circular anal ligature I left in a few days longer than is usually recommended, but without the least inconvenience, however, to my patient, and I firmly believe of great advantage in assisting to strengthen the anus or new sphincter during defecation. After the fifteenth day I removed the circular anal ligature, and from that time nature has become more accustomed to the "new departure."

At present the health of my patient is very good and she has so far recovered, that she can now say to her formerly uncontrollable fæcal evacuations, "Thus far shalt thou go and no further." Besides

that fearful dread which hung over her head and that detestable loathsomeness being removed, she is enabled to go out into society with a free heart and a cheerful countenance.

The operation occupied three-quarters of an hour, but the time could have been materially shortened had the perineum needles been longer, and had I been supplied with "serrefines" to control the jetting arteries.

There is a degree of satisfaction attending an operation of this kind, in contemplation of the terrible condition of the patient to herself as well as to her relations and her husband, and the happy union which has been effected "which knows no misery nor feels no shame."

Correspondence.

MEDICAL BENEVOLENT SOCIETY,

To the Editor of the CANADA LANCET.

SIR,—The article in the May issue of the LANCET, on the rewards of professional labour, revived in my mind a subject I have thought of for several years, that is, the possibility and the judiciousness of forming upon a solid basis, a Medical Benevolent Society, whereby each member of the profession could, by the payment of a yearly sum, leave something more than a name to his widow and family, at his death. The rates of Life Insurance Companies are so high as almost to preclude the possibility of his doing so. For instance, a man of thirty years of age, in order to insure a couple of thousand dollars at his death, will have to pay about forty or fifty dollars a year, quite a rent.

Now, I am not sure how many registered physicians there are in Ontario, but we will assume that there are two thousand—the payment of, we will say, two dollars apiece upon the death of any member of the profession, would be a very material assistance to his family. I would very much like, Mr. Editor, to see something of this kind done, and I beg that you will use your influence and the influence of your journal, to bring it to the notice of the profession, that we may have a full expression of opinion upon it, and by so doing you will much oblige,

Yours truly, MEDICUS.

Reports of Societies.

HURON MEDICAL ASSOCIATION.

The regular meeting of the Huron Medical Association was held in Clinton, on Tuesday, April 4th, Dr. Holmes, of Brussels, president, in the chair. The following members were present: Drs. Holmes, Worthington, Gillies, McLean, McDonagh, McMicking, Williams, Scott, Graham, Duncan, Hurlburt and Stewart.

Dr. Duncan of Seaforth exhibited a second well-marked example of *Jacksonian Epilepsy*. The patient, a female child, aged 38 months, was in good health, until she was eleven months old, when the present difficulty commenced suddenly with convulsions confined to the right arm, leg and right side of the face, which lasted, it is said, for six hours, and was followed by paralysis of the convulsed parts of some weeks duration. From this time up to the end of the child's second year, no regular fits occurred, but soon afterwards they were very marked, and when very severe the left side of the body was affected, but it was never paralyzed like the right side. Speech was confused and incoherent after the attacks For several months the attacks only occurred once a month. During last October they became very frequent — as many sometimes as fourteen in a single day. Since, she has been taking bromide of potassium, and now they only happen once in the six weeks. During the attacks, the head is drawn to the right side, and the eyes are turned to the left. When the child awakens her right extremities are found to be paralyzed. The paralysis however lasts but a few hours as a rule. The child is often fretful, and when gentle pressure is made on the left ear she becomes quiet and falls asleep. Memory and intelligence good. She formerly appeared to be conscious during the attacks, but lately she has not been so. Three members of her grandfather's family were epileptic.

Dr. Graham, of Brussels, showed a woman, aged 49, who has Dupuytren's contraction of the little and ring fingers of both hands.

Dr. Gillies, of Teeswater, showed a well-marked example of infiltrating carcinoma of the right breast with secondary deposits in the pleura in a woman, aged 47.

Drs. Stewart and Hurlburt, of Brucefield, showed

a boy, aged three-and-a-half years, with left hemiplegia following unilateral (left) convulsions. The child who was convalescing from scarlet fever was seized on the 14th of January last with convulsive movements of the left arm, leg and face, which lasted for eight hours. On the following day the child was still unconscious with a pulse of 140, and a temp. of 104°F., but there was no return of the fits. On the 16th of January, the left arm and leg were found to be completely paralyzed, in which condition they remained for a week. Since then, there has been a gradual improvement, but the child still drags his left leg. The left arm has almost completely recovered with the exception of some of the complex hand movements. The urine never contained any albumen, nor was there discovered at any time any deficiency in the quantity of urea. It is probable that both the convulsions and paralysis in this case were brought about by a meningeal hemorrhage.

ONTARIO BOARD OF HEALTH.

The first meeting of the Provincial Board of Health, constituted by the Act passed at the last session of the Ontario Legislature, was held in Toronto on the 9th ult., the following members comprising the Board :—Dr. William Oldright, Toronto, (Chairman); Dr. H. P. Yeomans, Mount Forest; Dr. F .Rae, Whitby; Dr. C. W. Covernton, Dr. J. J. Cassidy, and Dr. J. Hall, Toronto; and Dr. P. H. Bryce, Guelph, Secretary. The Chairman delivered his opening address, which was published in full in the Toronto *Mail*. The small pox epidemic in Windsor was the first matter discussed, and instructions forwarded to the local Board of Health. A letter was read from Dr. Baker, Secretary of the Michigan Board, respecting immigrant inspection. Dr. Cassidy read a report of the proceedings at the Sanitary Convention lately held at Greenville, Mich. Drs. Covernton and Yeomans, who had been deputed to investigate the cause of the prevalence of typhoid fever at Sarnia, read their report. They attributed the cause to the impure water supply. Recommendations were adopted which will be forwarded to the town council. A committee was appointed to draw up a set of by-laws for the government of the Board.

In the evening session, after routine, it was moved by Dr. Cassidy, seconded by Dr. Yeomans, "That advice be telegraphed to the Mayor and Police Magistrate of Windsor concerning the epidemic of smallpox there, and that a copy of the Health Act of 1882 be mailed to these gentlemen." Carried.

It was then moved by Dr. Rae, seconded by Dr. Cassidy, "That the report from the Committee of the Whole, concerning the report of the Committee of Investigation appointed to examine into the epidemic of typhoid fever in Sarnia, be received and adopted; and further, that a copy of the report and its endorsation, with recommendations by the Board, be forwarded to the Mayor of Sarnia." Carried.

The Board met again May 10th. After routine, the secretary was instructed to write to Dr. Coventry, of Windsor, asking him to take every precaution against the spread of small-pox. The Committee on By-laws reported as follows: That meetings of the Board be held in Toronto in February, May, August, and November; that committees be appointed on food, drinks, and their adulterations; on water supply, poisons, explosives, etc. Dr. Yeomans read a draft circular to be sent to the clerks of the different municipalities in the Province, asking that sanitary measures be strictly enforced. Dr. Covernton said that if these measures were enforced they would have as perfect a system of sanitary legislation as existed in any part of the continent. It was decided to have the circular printed and distributed. It was also decided to have extracts from the statutes bearing on public health printed and circulated with the circular. There was some discussion on the appointment of a medical practitioner to examine immigrants passing through the city, but no steps were taken, the matter being left to Hon. Mr. Hardy. At the meeting in the evening a resolution of the Michigan Board of Health, asking the co-operation of the Ontario authorities with regard to the inspection of immigrants, was submitted. A proposal for the registration of statistics regarding diseases was referred to a committee, to report at the June meeting. Circulars were sent to different municipalities and medical men, calling their attention to the provisions in the Health Act. Dr. Covernton explained the Rochdale system with reference to

the disposal of excreta and also advocated the establishment of public urinals. The chairman mentioned that Dr. Anderson had been appointed health officer at Niagara and that Niagara was taking steps towards aiding the work of the Board.

May 11th, 1882.

The Board met again this morning to complete unfinished business. After routine, the secretary was instructed to procure the necessary exchanges of sanitary literature, and also to procure a seal for the Board.

Moved by Dr. Covernton, seconded by Dr. Yeomans, and carried :—"That the digest of the Provincial laws for the guidance of municipal councils relative to the powers vested in them by the statute for the suppression of infectious and contagious diseases be submitted to the Attorney-General for his approbation, and that three thousand copies be printed for distribution ; also, that three thousand copies of the circular to clerks of municipallties be printed, instead of one thousand."

A resolution was also moved by Dr. Covernton, seconded by Dr. Yeomans, and carried, recommending the adoption of a by-law by city or other municipal authorities to prevent the construction of any building on a site which has been filled up with garbage, or other offensive material, until the oil has been examined and approved of by the city engineer or health officer.

It was moved by Dr. Yeomans, seconded by Dr. Covernton, and carried, that the Secretary be instructed to procure a supply of reliable vaccine for the use of medical practitioners.

The question of establishing a vaccine establishment in this city was brought up, and a special committee was appointed to make the necessary enquiries and report at next meeting.

An account for $105 for travelling expenses, incurred by members of the Board, was passed.

A suggestion by Dr. Wells, of Barrie, that in order to prevent the spread of contagious diseases, all premises where such diseases have existed should be disinfected, was approoved of. On motion the Board went into Committee of the Whole to consider the supplementary report regarding the water supply and sewerage of Sarnia. The Board recommended that instead of taking the water from Sarnia Bay, as at present, the Corporation should extend a water pipe into Lake Huron, a distance of only two miles from the city.

After votes of thanks to the physicians, members of the Council and inhabitants of Sarnia ; Dr. H. B. Baker, secretary of the State Board of Health, Michigan ; Mr. John K. Allen and Dr. Nicholson, Secretary's Department and others, for the courtesy shown to members of the Board during their recent visit to their respective localities, the meeting adjourned.

Selected Articles.

LINEAR RECTOTOMY.

BY JOHN ASHHURST, M.D., PHILADELPHIA.

The case I bring before you to-day, gentlemen, is one of some standing. The patient, a middle-aged man, has been suffering from several openings near the anus, causing him considerable pain and inconvenience.

I made a superficial examination a few days since, in which I thought I detected, besides the sinuses, a stricture situated low down near the sphincter. This feeling of constriction may, however, have been due to the violent contraction of the sphincters, the patient not being etherized, and the pain consequent upon the examination being considerable. To-day I propose to have ether administered, and to make a thorough examination, and if I find a stricture I will perform the operation introduced by Verneuil under the name of *linear rectotomy*, using the *ecraseur* as recommended by that surgeon. In some cases, where the stricture is high up, we must rely on dilatation by means of rectal bougies. I have brought several of these with me that you may see the various instruments used in strictures of the rectum ; they may be either simply conical, or provided with bulbous extremities, and by their proper use much good may be accomplished, and the patient afforded great relief.

Linear rectotomy has been performed where the stricture has extended as high as four inches above the anus ; this is as high up as it is safe to go without risk of opening the peritoneum, and even here, should hemorrhage occur, there would be great difficulty in checking it, so that I advise you to rely on dilatation and not on rectotomy if the stricture extends beyond two-and-a-half inches. In this case I find the stricture near the anus, and the operation will therefore not be particularly dangerous, while it will afford the best prospect of relief. Contrary to what is generally supposed, fistulæ, in cases of rectal stricture, open more often below the stricture than above.

It is very easy to understand how an obstruction in the canal might by the retention of irritating materials cause ulceration and fistulæ, communicat-

ing with the bowel above the stricture; but it is not so easy, at the first glance, to see why they should open below; this is, however, as I said, very commonly the case, and the fact has a physiological explanation.

In the latter part of the normal act of urination, we have one or more rapid contractions, termed by French writers the "*coup de piston*," which expel the last drops of urine, but if from prostatic obstruction, or other cause, this be wanting, we have dribbling; also, at the end of defecation we have a similar act, as you have all undoubtedly noticed in the horse, in which there is an extrusion of the whole lower part of the mucous lining of the bowel, by which the rectum is entirely cleared of fecal matter. If now there is a stricture present, this act is incomplete, and there always remain some particles of feces below the constriction, which act as irritants, and finally cause abscess and fistula.

The flow of mucus from the rectum, which you observe, is very characteristic of stricture. I find on examination, as I said, a stricture a short distance above the sphincter. I cannot trace either of the two discharging sinuses directly into the rectum, but by slitting up their superficial portions may be able to find their openings; one communicates with the gut below, and the other above, the internal sphincter, but both below the stricture. I will open up this sinus towards the median line, and then introduce the chain of Chassaignac's *ecraseur* through the sinus, and into the rectum above the stricture, will divide the tissues in the median line, and in this way avoid making unnecessary wounds. You must proceed slowly after the *ecraseur* once begins to bind; the best plan is not to follow any given plan by the watch, —some surgeons advise making a turn every quarter of a minute—but to pay attention, and when the instrument binds or is arrested, wait a few seconds, and then turn again, until it again binds, using quick, short, jerking turns. If you proceed too rapidly you are liable to have bleeding; but by adhering to the above rule I have never had troublesome hemorrhage after the use of the *ecraseur*.

This operation has been modified by using the wire galvano-cautery, the effect of which is to cause a slough over the entire surface of the wound, and an increased likelihood of secondary hemorrhage. Many gynæcologists, who formerly used the cautery, are now returning to the use of the simple *ecraseur*. I prefer, too, the chain to the wire *ecraseur;* the wire is very liable to break, and the operator may then be compelled to complete the operation with the knife or scissors. With the chain, on the other hand, there is no annoyance of this kind, and by proceeding slowly there is no danger of hemorrhage The *ecraseur* is a very useful instrument in its place, but its value has been exaggerated by some surgeons, who have even gone so far as to employ it in lithotomy and in amputation of the thigh. When, however, you have a somewhat narrow, vascular portion of tissue to divide, and especially if it is deeply-seated, the *ecraseur* is safer than the knife. One difficulty which you will meet with in its use, will be the drawing up of shreds of tissue into the instrument, which clog its motion, and require it to be freed with blunt-pointed scissors. The stricture having now been divided without bleeding, we will dress the wound by placing in it strips of lint to prevent its uniting superficially, and allow it to heal by granulation.—*Medical Bulletin, Feb., 1882.*

MODES OF OBTAINING PRACTICE.

The *Daily Graphic* gives the following humorous sketch of the various modes adopted, by some medical men, of obtaining practice:

Patient—Now, doctor, how would you define "medical science"?

Doctor—Well, medical science sometimes consists in making a person think he's very sick when he isn't, and at other times it tells people there isn't much the matter with them when they're half dead. Sometimes all this depends on the size of the patient's pocket-book. That in medicine is a very important and vital organ. The great aim, however, in my experience, is to have as many folks sick as possible, and to keep them sick.

Patient—What is your idea as to the naming of diseases?

Doctor—To change the name at least once in ten years.

Patient—Why?

Doctor—Because old names, such as "croup," "lung fever," etc., get too common. People are too apt to find out how to treat such diseases themselves. But when we clap a Latin name on the old complaint it mystifies the public, scares them, and sets them all adrift again. There'd be millions of dollars lost to the medical profession if we didn't change the names of our complaints occasionally.

Patient—Suppose a well-to-do person is a little out of sorts and comes to you with an idea that something very serious is the matter with him, what will you do?

Doctor—This affords me some of my best paying practice. In such cases I "break up the disease." I tell him that he is seriously threatened with something awful in Greek or Latin, composed of two words, seven or eight syllables and one hyphen. Then I put him on a course of harmless drugs, to be taken at regular intervals of two hours. I put him also on a strict system of diet and keep him in bed. It requires about a week to "break up the disease." "Such prevention is better than immediate cure." "It pays better, too."

Patient—When you are called in and are yourself uncertain as to the nature of the patient's sickness, what do you say to his inquiring friends or family?

Doctor—The proper course in all such cases is to look wise and grave, and say as little as possible. We leave some medicine, of course. How can one be a doctor unless he always gave medicine? The medicine quiets the patient's mind and those of his friends. Patients, to tell the truth, are as bad as doctors in this respect. They will insist on having some medicine when they do not need it. But it never pays for a doctor to talk much.

Patient—If you are called in after the sick person has been for several days previous in the care of another physician, and the patient dies, what is your course?

Doctor—Invariably to regret to particular friends, in a subdued manner, at the proper times and places, that I had not been called in before the disease made such headway.

Patient—Do you not think in many cases of sickness that nature, aided by plenty of rest and good nursing, would effect a cure?

Doctor—We do not encourage nature in such practices. It would ruin the profession.

Patient—Now, if you treat a patient for you don't exactly know what, and he recovers, don't you take all the credit for such recovery?

Doctor—Sir, that is a professional secret.

Patient—Can you tell me, doctor, why it is that an expensive office, a horse and carriage, and a residence in the fashionable quarter, are practically considered as of much, if not more, importance to a doctor than his skill or experience in his art, and that a doctor without the capital to set himself up in this manner, be his skill ever so great, can never hope to attain a fashionable practice?

Doctor—Certainly I can. It's custom and stupidity. But stupidity makes money for us. Are we going to try and cure stupidity? Kill the goose that lays for us golden eggs? Never.

Patient—What other means have you for stimulating and developing practice?

Doctor—A good doctor will always have a reputable standing in some respectable church. He will at least hire a pew—front pew if possible—and send his family regularly. Of course, he must have a family. A doctor without a family is unsafe—hasn't given any hostages to society. He needn't attend church regularly himself. If he has much practice, it isn't supposed he can. The sick man must be visited, Sunday or no Sunday. And when he does come to church, it is well to have him called out occasionally—case of sudden illness—doctor sent for; so hard on the poor man, too, when he has so little opportunity to worship. Yet, no rose without its thorns. No—I mean no cloud without its silver lining. When the doctor is called out of church all the congregation will see he's in demand. It's a splendid advertisement.

Patient—Who are the most permanent and lucrative patients?

Doctor—Women.

Patient—Why?

Doctor—Well, I think sometimes they had rather be sick and under a doctor's supervision than not. Another reason is they are more perverse than men in clinging to the causes of their ailments. A man better realizes that without health he cannot carry on his business. So when he finds out the cause of disease he'll set to work to stop it. Tell a man he needs more fresh air and he'll try and get it. Tell him he needs more out-door exercise and he'll try and take it. But most women won't. They squeeze themselves into corsets, and insist on being cured of ills caused by corsets with pills. They'll go out in cold, damp weather in costumes which show off their figures and without cloaks, when the cold drives all the blood from their skin, for hours. They'll insist on being cured by doctors and pills. They'll wear tight shoes, which deform and pain their feet, and this plan drawing indirectly from their strength—they'll insist on being cured with more pills. Nor is this all. But I shall tell no more. It is giving the "profession" away. These things involve our most lucrative secrets. I shan't be thanked now by thousands of brother medical nurses of disease for what I have told. Go to, young man! Go to! You've got enough, and how in the world you've managed to worm out of me what you have is a mystery. Get thee to a nunnery! I'll never more have one such as thou pumping from me that information which is to me my professional life-blood. Thou art an interviewer disguised in the likeness of a sick man. Go to!

TREATMENT OF DELIRIUM TREMENS.

Dr. Whittaker (*Cin. Lancet and Clinic*), gives the following treatment of this affection:—

Chloral is the cardinal remedy in the treatment of delirium tremens. A single large dose of it will often jugulate the disease. Less than thirty grains is useless, and it is wise to give a whole drachm at once. One large dose is infinitely better than repeated small doses, and there is no danger in the use of it in this disease, provided, I repeat it again and again, provided there is no weakness at the heart. But drunkards, you say, are the very individuals who have fatty hearts. So they do, and hence with chloral as with every other remedy, you must pick out your cases. A young strong man, like this, suffering with his first attack or attacks, is not yet the subject of this

lesion. It is the old drunkard, the habitual sot, who more especially suffers in this way, the gross, corpulent, heavy, sluggish and thoroughly selfish individual who oftenest has the fatty heart. Put your ear down to the chest and listen to the sounds of the heart. If they are muffled, if the pulse is feeble, if it fade away entirely when you hold up the arm at right angles to the body, you will give no chloral to the patient.

What then will you give? Opium. Opium is the anodyne for the more chronic case, or for the acute complication in a chronic case. Give morphia preferably and give it hypodermically, that it be not rejected. Give in an average case one-half a grain of morphia in this way, and having waited ten or fifteen minutes for its immediate effects, you may leave the case for two or three hours to the assistants. If there shall have been still no sleep, and the pupils are not contracted, you may give one-fourth of a grain more. Here you will stop for four hours at least, when you will wish to see the condition of the pupils again. If they are now contracted and the breathing is slow, your vigil with the case begins. Should these danger signs continue too long or grow worse, you will have to keep the patient awake. You will do this best, not by flagellation, not by dragging the patient about the room, nor forcing him between two men to walk the streets, nor by splashing him on the head with water, but by simply calling his name aloud in his ear. This you must repeat and repeat until the respirations come to ten to the minute at least, as you count it with your watch in your hand. Perhaps you may have to give much more morphia than I have indicated to secure the sleep, perhaps you may be so situated as to have the patient take the tincture of opium in divided doses over a longer time, perhaps you may have to combine the opium with something else, perhaps you may have a case to which you do not dare to give opium at all, because of the complicating pneumonia or meningitis; all these things you will have to determine, each man for himself, and each case for itself, and upon your judgment here as elsewhere will rest the result of the case and with you.

Three remedies there are with which to combat delirium tremens. Two we have mentioned already. The third is Digitalis. Digitalis is for the fatty heart, the weak pulse, the cold surface, in short, the collapse. Give in preference the infusion, freshly made, a dessertspoonful to a tablespoonful every two, three or four hours, how can anyone say, how much or how often in his judgment is best unless he sees the individual case.

The bromide of potassium is for the next day, for the day after the sleep, or for a mild case during the day, when the drug for the sleep is for the night.

But you are not yet done with the treatment of the case. The sermon is now to be preached, and you are the best preacher, better than any temperance fanatic. Because you can appeal to the revelations of science regarding the effects of alcoholism, appeal to the reason, if there is any left; while the other preachers may appeal only to the emotions which, even when strongest, fleet like the clouds. That we may ourselves, however, not dwell in generalities among the clouds, let me say that you will advise your patients to drink wine and beer instead of the stronger preparations of alcohol, for to the Southern peoples of Italy, Spain, and South Germany, where wine and beer flow like milk and honey in the promised land, delirium tremens is almost unknown.

PUERPERAL HEMORRHAGE.

Dr. Theophilus Parvin gives (*American Practitioner*) the following case, in which he obtained excellent results from hypodermic injections of ether :—

Mrs. K., thirty-seven years of age, was delivered of her third child at 7 a.m. The physician in attendance having failed to remove the placenta, and excessive hemorrhage occurring, I was sent for and saw her at 9 a.m. I found her almost pulseless, countenance with a death-like pallor, bathed with perspiration, restlessly tossing her arms, complaining that she could not see, that she was dying. Whiskey and ergot had been given to her freely, and caused occasional efforts of vomiting. My first step was to remove the pillow and bolster from under her head, and to have the foot of the bed raised, so as to facilitate the flow of blood to the anæmic brain. Next, placing one hand on the abdomen, I could not feel the uterus. It was without form and flaccid as the abdominal wall itself. The other hand was introduced into the vagina, and from the vagina into the uterine cavity. I found that the cord had been torn loose close to the placenta, in vain efforts to extract the latter, which was free in the uterine cavity. The uterus was completely relaxed, as flabby and soft "as a piece of wet tripe." In vain I sought, by compression and friction through the abdominal wall with one hand, and by movements of the other within the uterine cavity, to excite contractions. I then removed the placenta and injected water at the temperature of 110°, but still there was no response from the muscular fibre of the uterus, although the patient complained of the heat of the water as it flowed out through the vagina, and her exhaustion became still more alarming.

Remembering the very favorable results obtained by Hecker, in uterine hemorrhage, from hypodermic ether, I injected twenty drops of sulphuric ether, and repeated the operation at intervals of from five to ten minutes, until one drachm and a half of the liquid had been thus introduced. Meantime

direct stimulation of the uterus by friction and compression externally, and by a hand in the uterine cavity, was continued, and about the time the last hypodermic was used contractions first manifested themselves, and within half an hour the uterine contraction was nearly as complete as is observed after normal labor.

Of course, the patient's convalescence was very tedious. It was three weeks before she could sit up in bed without fainting. Nevertheless, her recovery was uninterrupted.

Dr. Parvin concludes as follows: "But, whatever method may be resorted to for the arrest of the hemorrhage, it is of the first importance that the patient should be restored from her profound prostration. Among the means of this restoration probably none is so prompt and effective as hypodermic ether.

CHOREA TREATED BY ARSENIC.*

Dr. F. Minot *(Boston Med. Journal)* reports the following case: Maud B., a little girl nine years old, entered the Massachusetts General Hospital, April 20th, 1881. Her father was in good health; the mother died of some disease of the uterus; her father's sister had chorea for a year. The child was of a nervous temperament, but has always been well. She had never had rheumatism. The present attack began March 15th, while the patient was at boarding-school, and the power of speech began to be lost April 1st. On her entrance into the hospital the child was unable to speak. On trying to walk she would fall down and with difficulty could get up again. There was incessant incoördinate twitching of the legs, arms, and facial muscles. She could not feed herself, articles of food dropping from her hands. The movements were not more marked on one side than the other. During sleep the motions still persisted, though to a much less degree than while she was awake. She was not emaciated, nor especially anæmic. The intelligence was good. She readily understood what was said to her, though unable to reply.

There was no cardiac murmur. The appetite was good; bowels constipated. Two examinations of the urine showed the color to be pale; specific gravity 1013 and 1027; very slight trace of albumen, the urea at first diminished and then increased; sediment not abnormal.

The treatment consisted in suitable nourishment, exercise in the open air, and the solution of the arsenite of potash three times daily, beginning with three drops at a dose, which was gradually increased to seven drops, and then, on account of gastric disturbance, diminished to five drops. During the last week of her stay in the hospital she took, in addition, three grains of the citrate of iron and quinine before meals. Three days after taking the arsenic she became much more quiet during the night. April 26th (sixth day) she spoke for the first time. April 29th (ninth day) there was "marked improvement in all respects." May 20th she was well and ready for discharge, though she did not actually leave the hospital until the 30th. No exciting cause for the disease is known.

The total duration of this case was about fifty-six days; the time from the first dose of arsenic to recovery was twenty-nine days. If the remedy did not abridge the duration of the disease, its beneficial effects were immediate and striking.

*Read before the Section for Clinical Medicine and Pathology of the Suffolk District Medical Society, March 9, 1882.

REMOVAL OF BENIGN TUMORS OF THE BREAST WITHOUT MUTILATION.—Prof. T. Gaillard Thomas Surgeon to the New York State Woman's Hospital, contributes to the April number of the *N. Y. Med. Jour. and Obstet. Review*, a paper, in which he expresses himself in favour of removing benign tumors of the breast as a rule, because the mere presence of a tumor in the breast usually renders the patient apprehensive, nervous, and often gloomy, while with our present improved methods of operating, the patient is exposed to slight risks, the danger of the growth of the tumor is removed, and with this disappears at the same time that of the subsequent degeneration of a benign into a malignant growth. If in addition to these advantages we can add the avoidance of all mutilation to the person, we have strong grounds for departing from the practice of non-interference.

The method of operation described, Dr. Thomas has practiced thus far in a dozen cases. He distinctly states that it is entirely inappropriate for tumors of malignant character, and that it is applicable neither to very large nor to very small benign growths, being insufficient for the former and unnecessarily radical in its character for the latter The growths for the removal of which he has resorted to it have been fibromata, lipomata, cysts, and adenomata, and have varied in size from that of a hen's egg to that of a duck's egg, or a little larger. The operation is thus performed:—The patient standing erect and the mamma being completely exposed, a semicircular line is drawn with pen and ink exactly in the fold which is created by the fall of the organ upon the thorax. This line encircles the lower half of the breast at its junction with the trunk. As soon as it has dried the patient is anæsthetized, and with the bistoury the skin and areolar tissue are cut through, the knife exactly following the ink line until the thoracic muscles are reached. From these the mamma is now dissected away until the line of dissection represents the chord of an arc extending from extremity to extremity of the semicircular incision. The lower half of the mamma which is now dis-

sected off, is, after ligation of all bleeding vessels, turned upward by an assistant and laid upon the chest-walls just below the clavicle. An incision is then made upon the tumor from underneath by the bistoury, a pair of short vulsella forceps is firmly fixed into it, and while traction is made with it, its connections are snipped with scissors, the body of the tumor being closely adhered to in this process, and the growth is removed. All hemorrhage is then checked, and the breast is put back into its original position. The outer or cutaneous surface is entirely uninjured, and the only alteration consists in a cavity at the former situation of the tumor. A glass tube with small holes at its upper extremity and along its sides, about three inches in length, and of about the size of a No. 10 urethral sound, is then passed into this cavity between the lips of the incision, and its lower extremity is fixed to the thoracic walls by india rubber adhesive plaster, and the line of incision is closed with interrupted suture. In doing this, to avoid cicatrices as much as possible, very small round sewing-needles are employed. These are inserted as near as possible to the edges of the incision, and carry the finest Chinese silk. After enough of them have been employed to bring the lips of the wound into accurate contact, the line of incision is covered with gutta-percha and collodion, and the ordinary antiseptic dressing is applied. If the glass drainage-tube acts perfectly there is no offensive odor to the discharge, and the temperature does not rise above 100°. The tube is in no way interfered with until the ninth day, when the stitches are removed. If, on the other hand, the tube does not appear to perform the function satisfactorily, it is manipulated so as to cause it to drain all parts of the cavity, and warm carbolized water is freely injected through it every eight hours. On the ninth day, when the stitches are removed, the tube is removed likewise.

Treatment of Goitre with Ergotin.—M. Bauwens, speaking of the *treatment of goitre with ergotin*, divides cases of goitre into the following classes: 1. Cystic goitre, with easily apparent fluctuation. 2. Goitre partly cystic and partly hypertrophic. 3. Goitre characterized by diffuse parenchymatous hypertrophy and great vascularity. 4. Recent goitre, soft and diffuse. In cystic goitre, and in soft, diffuse, recent goitre, the author considers that iodine is the best remedy, and has most confidence in parenchymatous injection as the mode of its employment. He calls attention to the fact, however, that in proportion as vascularity predominates as a cause of thyroid enlargement, so will iodine fail to cause reduction. Iodine stimulates the reabsorption of the contents of the cysts, but cannot cause the vascularity to diminish. It is in these latter cases that the author recommends ergotin. The ergotin should be injected into the substance of the tumour; it at once causes contraction of the muscular coats of the small arteries, and a dimunition in the size of the tumour and in the amount of pulsation observed is at once apparent. He uses the following solution: ℞. Yvon's ergotin, 1 gramme (gr. xv); glycerine, water, in equal parts, enough to make 7 grammes (ʒ j¾). Of this solution he injects 2 grammes (ʒss.) at a time directly into the substance of the goitre; this treatment is repeated at intervals of about two weeks until a cure is effected. It may not be out of place to mention that the ergotin of Yvon does not differ in any essential from that of Bonjean and other makers. The author reports the following case: A woman of twenty-nine has suffered from goitre since the age of fourteen. Moderate in size for seven or eight years, the tumour has lately begun to enlarge quite rapidly; at the time of examination it measured three inches transversely, by two and a half vertically, the right lobe predominating. It was elastic to the touch, pulsated, and presented a slightly marked souffle. At the menstrual epoch, upon excitement, or as a result of singing, shouting, or hard work, the tumour became more enlarged, and pulsated vigorously. The signs were those of a goitre, essentially hypertrophic, with predominance of the vascular element. At times there were attacks characterized by dyspnœa, buzzing in the ears, dizziness, and dimness of vision. Twice the patient had suffered from attacks of complete aphonia lasting two or three weeks. Iodine had been tried in various forms and ways, but without any good result. Parenchymatous injections of ergotin, as described above, were practiced for five weeks, every six or seven days; at the end of that time the tumour had completely disappeared. There was at no time any considerable soreness or pain as a result of the injections. A little swelling, with some sensitiveness at the point of injection, lasting only about forty-eight hours, was the only trouble occasioned. The author suggests the treatment in exophthalmic goitre, although he has not yet had an opportunity to try it.—*Concours Medical—Lancet and Clinic.*

Trephining in Idiopathic Abscess of the Brain.—The patient, aged forty-five years, had suffered since his thirty-seventh year of phthisis, with repeated attacks of hæmoptysis; from this he apparently recovered completely. In March, 1881, he suffered from severe migraine of the left side, the pain being most marked in the frontal and occipital regions. The seeing of sparks and flashes, by which the patient had been troubled, was substituted by a cloud which appeared before his eyes. In walking he would strike against objects approaching from the right side, and an opthalmoscopic investigation revealed that the right squints of both fields of vision were insensible to light. Gradual emaciation of the patient; loss of appetite; oc-

casional attacks of fever with slight chills ; increasing debility. Tongue and facial muscles unaffected. Right arm and leg decidedly paretic ; the leg being more so than the upper extremity. Sensibility to pain retained in both. The paretic symptoms supervened four months after the ocular trouble.

From this last named symptom it seemed very probable that the abscess which was suspected, originated in the cortical portion of the cerebral hemispheres posteriorly, whence the disease extended forwards and in the course of time involved the motor centres. In its extension forward, the diseased process first came in contact with the motor centre for the lower extremities, and in this way the greater paresis of the lower limb can be easily explained. The facial and lingual centres being farthest removed, the parts supplied from them remained unaffected.

Since there could be no doubt as to the nature and bent of the lesion, the indication for trephining was directed. Ubi pus evacua ! It was the only chance for saving the life of the patient. The operation was practiced while the patient was fully narcotized with chloroform. The hair having been removed from the left side of the scalp. An incision was made six cen. in length, beginning three cen. below the superior posterior angle of the parietal bone, and continued towards the anterior and inferior angle Upon this a second incision was made at a right angle. A button of bone having been removed, the exposed dura mater looked distended ; no pulsation perceptible. When the dura mater was opened, no pus was visible. The cortical substance appeared softer than usual and was œdematous. About 4 cen. beneath the surface a somewhat resisting mass could be felt. Into this a canula was introduced and vent given to a drop of pus. A deep incision was then made into this part and three teaspoonfuls of rather thick pus escaped. The pulse at once improved and pulsations of the brain became manifest. The abscess cavity was washed out with a pulverized solution and a thin drainage tube inserted into it. During the first six days after the operation a decided improvement was visible in the condition of the patient. The patient's condition was ameliorated, respiration freer and sensorium clearer. On the evening of the sixth day a chill supervened, from which time the patient declined rapidly, and died on the fourteenth day after the operation.

The post-mortem examination revealed a tubercular abscess of the posterior portion of the left parietal and occipital lobe of the brain. Recent spontaneous perforations into the left lateral ventricle. A few small tubercular masses were detected in the vicinity of the large abscess.—C. Wermicke and E. Halm, *Virch. Arch., Vol.* 87.—*Cin. Lancet and Clinic.*

ADVERTISEMENTS.—There is no one subject in regard to which the profession are so incorrectly informed, as they are in regard to the advertisements in a medical journal. As has been said by a friend, in correspondence, t e great fault in relation to medical journals, as observed by himself, is, that as soon as a medical journal obtains a large subscription list, it immediately carries a large number of advertisements. And his observation is that which the great majority of physicians would make, if interrogated on this subject.

Now the fact is that no greater blunder could possibly be made, and it is well to correct it.

If a publisher *decreased* the number of text pages of a journal, as he *increased* the number of advertising pages, such a course would be dishonorable ; it would be unjust to the subscriber, and would render a journal unworthy of support. But if he increases the number of advertising pages, and does not lessen the amount of reading matter, such a course should be most welcome to every reader, for it is an evidence that the journal is a success ; that it is on a sure basis ; that advertisers select it on account of its offering a large circulation to themselves, and that their money is safely and judiciously invested. But, more than all, a large advertising business largely increases the revenue of a journal, enabling it to offer increased advantages and attractions to its subscribers.

It is on account of its large advertising business that the *New York Herald* is constantly increasing the quantity and improving the quality of its reading matter ; that its editorial corps is strong ; that its contributors and correspondents furnish interesting facts from all parts of the world. Cut off its advertising department and the *Herald* could not pay expenses.

The same reasoning is true in regard to the *London Lancet*, the largest and best medical journal in the world. In its present form it carries 32 pages of reading matter, and 48 of advertisements ! ! the largest proportion of advertisements of any medical journal published. Here advertisers seek a large, good, and well distributed journal. In turn they pay to it a large revenue, and this revenue is largely spent in securing for its readers the best medical matter to be obtained. Without this advertising support, the *London Lancet* could not possibly offer to its readers more than a mere fraction of the great advantages which they at present enjoy. In fact, the abrogation of its advertising department would so change the quantity and quality of the reading matter, that its best friends would no longer know the *Lancet ;* would reject it and forsake it.

There is, then, no greater blunder than to object to a journal on account of its large advertising department : *the size of this department is the key to a journal's success and the index of its prosperity.*—*Gaillard's Med. Journal.*

THE SURGERY OF THE URINARY ORGANS.—The recent advances in the surgical treatment of diseases of the urinary organs are the most interesting topics of discussion at the medical societies of London at the present time. Last week, at the Medical and Chirugical Society, Sir Henry Thompson described a case of pedunculated fibroma of the bladder, which he had successfully treated by removal through a perineal incision. The patient was originally under treatment for calculus, and was submitted to lithotrity more than once, but the symptoms were not completely removed; and then, on careful exploration of the bladder, the tumor was grasped, though, as it was coated with a phosphatic deposit, it was mistaken for a sacculated stone. Sir Henry Thompson opened up the membranous portion of the urethra from the middle line, and then, after detecting the true nature of the case, removed the growth by twisting it off with a pair of forceps; there was no bleeding to speak of, and the man made an uninterrupted recovery. Sir Henry strongly urged that where it is necessary to open the bladder for diseases other than stone, it is better to open the membranous urethra in the middle line, than to do either the "lateral" or suprapubic operation; he insisted that the bladder could be efficiently drained and explored through this incision, that most tumors of removable size could be removed through it, and that it was a far simpler and safer procedure than either of the others. In the subsequent discussion many speakers joined issue with him on this point; Mr. Bryant, Prof. Marshall, and Mr. R. Harrison, for instance, preferring the lateral incision. But, of course, the chief point raised in the discussion was the diagnosis of the tumors which are capable of this treatment, from those which are not. The most reliable points in favour of the former being youth and the absence of induration on rectal or vaginal examination. Sir Henry Thompson's case will probably be of great service in drawing marked attention to the subject, and especially in encouraging surgeons in exploring the bladder through a perineal urethral wound, which, he says, can be done so easily and so efficiently. As this operation is practically free from danger, it will probably be used as an aid to diagnosis as much as for treatment.

Three meetings during the present session of the Clinical Society of London, over which Mr. Lister presides, have been devoted to the subject of operations upon the kidney. Nephro-lithotomy, or excision through the loin of a stone from the kidney, has been shown to be a very successful operation if the stone be small, as these calculi often are, and the renal tissue healthy. Mr. Battin and Mr. Beck related such cases, but Mr. Godbe contributed a case in which the kidney was greatly enlarged, sacculated, and each sacculus was filled with a good-sized stone; here excision of the whole organ was attempted, but the patient died. Nephrotomy, or exploration of the kidney, with or without incision into it, has also proved very useful on many occasions. The operation itself appears to be very free from danger, and in most cases the kidney has been easily exposed. When stone is suspected, a long needle set in a handle, devised by Mr. Barker, is used to puncture the organ in various directions until grating is felt. The incision and drainage of strumous and suppurating kidneys appears to be capable of affording great relief, but as yet has not proved absolutely curative; and at this point a divergence of opinion comes in, some maintaining that in such cases it is better to excise the kidney at once, and others that it affords a better chance to drain the kidney first, and then, when the patient has recovered a certain amount of strength, to do the more severe operation. Further experience is wanted to decide this point; the objection to postponing the excision is that the first operation leads to great induration around the kidney, and increases the difficulty of subsequent nephrectomy.

Nephrectomy, or excision of the kidney, is a very severe operation, and we have just had a series of three fatal cases presented at the Clinical Society; in one the death was from total suppression of the urine, and in the two others a dose of morphia, administered soon after the operation, is shrewdly suspected of having, at any rate, accelerated death. The special point on which there is a good deal of doubt here is, whether it is better to remove the kidney through the loin or through the belly. If the organ is very large, it cannot be excised by a lumbar incision, and it appears probable that the abdominal incision will be found to be the best in all cases. We are not so fearful of opening the peritoneal cavity as we used to be, and the removal of the organ can be proceeded with, with so much more exactness and ease from the front than from behind. The best abdominal incision seems to be one made in the linea semilunaris. The small intestines are to be well drawn aside, and the peritoneum cut on the outer side of the colon, and that viscus turned in. If, now, the cut edges of this layer of peritoneum are at once united to the edges of the wound, the operation in its further stages becomes extra-peritoneal.—*Cor. Medical News*

ADDISON'S DISEASE.—At a meeting of the Pathological Society of London, held Tuesday, Dec. 20, 1881, reported in the London *Lancet*, Dr. Fenwick showed a specimen of Addison's disease of the supra-renal capsules, from a case without bronzing of the skin. The man was recently in the London hospital, under the care of Dr. S. Fenwick. He was a laborer who had had fair health. About four months previously he caught cold; a month afterwards his urine became high-colored and scald-

ing, and he was languid and suffered from vomiting. On admission he was very languid; the pulse was very feeble; there was no pigmentation of skin or the mucous membranes, and no signs of visceral disease; there was tenderness over the epigastrium. Addison's disease was diagnosed. On September 28th, on attempting to get out of bed, he fainted, and soon after died. At the autopsy the organs generally were healthy. The liver was enlarged, and the left kidney was much larger than the right. Both supra-renal capsules were enlarged, hard, and nodulated; they were translucent, and in places yellow. He had collected all the cases of Addison's disease recorded in the Pathological Transactions during the last fifteen years, and found they were thirty in all, twenty-three males and seven females. The youngest age of males at death was five, the oldest fifty-five; the youngest age of females nineteen, and the oldest fifty-five. Average duration of illness in non-bronzed cases was 4.8 months, but in bronzed cases it was 26.8 months. If patients, without bronzing of the skin, died in one-fifth of the time of the others, the greater fatality was due to the constitutional disease, and the mischief causing this must be more intense. The two non-identical effects must have two different causes, or the same cause acting upon two different parts; the former idea might be certainly excluded. He thought the constitutional changes were due to degeneration of the medullary part of the supra-renal capsule, while the pigmentation was due to a chemical change in the blood resulting from the degeneration of the cortex of the capsule. The skin was well bronzed in nineteen cases, slightly or not at all in eleven. In four out of these eleven cases only one capsule was affected, and more often the right. In the case shown to-night, the disease clearly mapped out the medulla. Dr. Wilks said that Addison had known that in the early stage the bronzing was less marked, and thought that some cases died before bronzing occurred.—*Med. and Surg. Reporter.*

Differential Diagnosis of Abdominal Tumors.—Dr. Erich, of Baltimore, contributes a very instructive paper to the Clinical Society of Maryland, wherein he points out how easily we may make very singular errors of diagnosis in abdominal tumors. He illustrates his views by the narration of several cases, hoping, apparently, to add to the "known sources of error" in arriving at a good diagnosis. In Case 1, a first examination per vaginam "revealed an irregular, hard, nodular tumor in the left iliac region somewhat posteriorly," and a diagnosis of probable cancer was ventured. A year and a half after this examination the patient was examined jointly by Dr. Erich and Dr. Chadwick, of Boston, when the conditions noted, had entirely changed. The tumor then noted, had disappeared, "and a firm, round, moveable tumor, about the size of an adult head, was found occupying the hypogastric region." Present diagnosis—a fibroid. It was decided to remove the supposed fibroid by laparotomy. Upon making an incision and bringing the tumor in view, an exploratory puncture was made which yielded pure pus. The patient died, and a post-mortem revealed an abscess. This case teaches that fluctuation can not always be made out, even when a large amount of fluid is present. "I was compelled to acknowledge an error of omission," says Dr. E., "in not making an exploratory puncture before resorting to laparotomy. I have since then determined never to pronounce an abdominal tumor solid until after aspiration." Case 2 had been pronounced by an eminent surgeon a solid uterine fibroid. All the conditions so indicated; but true to his determination, an aspirator needle was introduced by Dr. Erich, and to the surprise of himself, as well as others, "a pint of pure pus was withdrawn." In Case 3 the patient had been sent to Dr. E. by a friend who had made out "probable diagnosis of ovarian tumor." The examination made by Dr. Erich appeared to exclude pelvic cellulitis and abscess—the diagnosis of ovarian cyst was therefore provisionally endorsed, and preparations for an operation were made. Preparatory to this a tonic treatment was set up, and a mercurial purge administered. The purgative produced diarrhœa with profuse and offensive discharges. Fever was established. The tumor was speedily reduced one-half. Aspiration, now instituted, removed a quantity of offensive pus and gas. The tumor was evidently a pelvic abscess. In his concluding observations Dr. Erich remarks: "In view of these difficulties, which have been acknowledged by the best men in the profession as liable to occur to them, I think it advisable to use the aspirator in cases of doubtful abdominal tumor before pronouncing definitely upon its nature.—*Obstet. Gaz.*

Simultaneous Trachelorrhaphy and Perinæorrhaphy.—Dr. James B. Hunter, Surgeon to the Woman's Hospital, gives, in the New York *Med. Jour. and Obstet. Review* for 1882, a number of cases of prolapsus uteri and of laceration of the cervix and perinæum, remarking that extraordinary cases are sure to be fully described, while those of every-day occurrence are often passed over as of little consequence. In the belief that the latter possess some interest and value to many readers, he proposes to present, from time to time, sketches of a few cases as they occur in his service. In regard to the performance of Emmet's operation for laceration of the cervix and the operation for lacerated perinæum, both at the same time, he states that several years ago he tried this method in a hospital patient, who could not remain long enough to have the operations done at the usual interval of two or three weeks. It succeeded so

well that he has ince done the double operation frequently, both in hospital and private practice, and has never had occasion to regret it. If, however, the laceration of the cervix is very extensive, or any condition exists that renders hæmorrhage probable, he always does the operations separately. Sometimes, too, it is not desirable to keep the patient long under ether, in which case the operations should not be done at the same time. The disadvantages of the double operations are: that it is impossible to reach the cervix, if it should be necessary, without sacrificing the new perinæum; that the patient is longer under the influence of ether; and that the sutures can not be removed from the cervix so soon. The advantages are: that the patient takes ether only once, and that she and her friends are spared the preparation (always somewhat formidable in a private family) for two operations; that there is an economy in time, as she lies in bed no longer than if the operation on the perinæum alone had been done; that a delicate patient suffers less fatigue, and is less emaciated, than she would be after having gone through two separate operations. He usually removes the sutures from the perinæum on the eighth day, and those from the cervix two weeks later, though with care the latter may be safely taken out earlier; while, on the other hand, there is no objection to letting them remain a month if it is convenient to do so, as they cause no irritation or inconvenience if the twisted ends of the wire are properly bent over and out of the way. While, therefore, he does not recommend the double operation as a rule, he considers it entirely practicable in many cases, and often prefers to do it.

Cyst of the Broad Ligament, Complicating Labor.—Dr. N. W. Webber, *Detroit Clinic*, reports the following case: During accouchment, progress was interrupted by what was supposed to be a fæcal mass, but which, on more careful examination, proved to be a tumor. This being rapidly forced down between the head and the sacrum, finally took position before the fœtal head. The attending physician then applied instruments, but could not deliver. While counsel was sent for, the funis came down, and could not be replaced; a calamity which resulted in the death of the child. Counsel having arrived, the forceps were again applied, and again without avail. At this time the tumor was about the size of a man's hand, and about twice as thick. Delivery was finally accomplished by recourse to craniotomy. The patient, after long and dangerous suffering from cystitis and inflammation of the soft parts, finally recovered, and was then informed by two other physicians that she had an ovarian tumor. One year after her confinement, she came under the care of Dr. Webber, who on examination, found a medium-sized tumor pressing well down into the posterior cul-de-sac, and that moreover, she was four months advanced in pregnancy. From a careful bimanual examination he was led to doubt the correctness of the previous diagnosis. He therefore put the patient under ether, and with a large-sized aspirator needle, punctured the tumor, giving exit to six ounces of the clear limpid fluid peculiar to cysts of the broad ligament; besides this, several ounces were afterward lost by drainage. No outward symptoms followed, save a slight irritability of the uterus, which was quieted with opiates. At the proper time, she was taken in labor, and was delivered of a large and healthy boy. Nothing like a tumor could be discovered after careful examination. The cyst was undoubtedly the cause of all her trouble, and had it been punctured at first, craniotomy would have been unnecessary, and the cystitis and other trouble would not have occurred. —*Obstet. Gazette.*

Prevention of Laceration of the Perinæum.—At the meeting of the St. Louis Medical Society, May 7th, 1881, the proceedings of which appeared in the *St. Louis Medical and Surgical Journal* for August, Dr. G. Hurt read a paper on Position in Relation to Injuries of the Perinæum during Labour, in which he gives the history of several cases tending to prove that a sharply flexed and abducted position of the thighs, though convenient and necessary in some cases, is not conducive to the greatest degree of security to the maternal soft parts at the moment of the passage of the child's head through the vulva, nor to the speedy and safe delivery of the child. In the autumn of 1877, he attended a case in which the second stage of labour was somewhat tedious; and just as the head began to distend the perinæum, the patient, as a matter of choice, took the left side position, with her thighs and knees sharply flexed. The fœtal head, which was unusually large, soon became impacted in the soft parts, uterine contraction became stronger and refused to intermit, the perinæum appeared to have reached the point of its utmost distention short of laceration, being pushed down so that the fœtal occiput rose from under the pubes, and yet the head was so completely enveloped by the expanded perinæum, that a rupture of the latter seemed inevitable. At this moment, however, the patient perhaps involuntarily, extended her limb to a line nearly parallel with that of her body, and coincidently with this movement the fœtal head passed through the vulva without any perceptible injury to the parts. The next case was that of a primipara, in which the fœtal head became so tightly impacted at the vulva as to cause considerable delay, though the uterus was contracting with great force, and laceration seemed inevitable. The patient was on her back, with her knees sharply flexed and abducted. She was requested to straighten her left leg, and as she

did so, the vertex became more prominent, and the forehead slid over the periuæum without causing even so much as an abrasion of the fourchette. In other similar cases, extending the thigh, when the passage of the child was impeded by a too rigid perinæum, was followed by the same happy result. The perinæum is not only relaxed by the extension of the limbs, but the degree of its inclination is increased so as to impose less resistance to the passage of the fœtal head, and *vice versâ;* in the ratio that the limbs are flexed and abducted, the perinæum and contiguous parts are put upon the stretch, and consequently its resistance and liability to rupture proportionately increased.—*British Med. Journal.*

Multiple Cerebro-spinal Sclerosis.—On February 27th, Dr. Whittaker reported the following case before the Academy of Medicine, Cin. :—

A professional gentleman, about thirty-five years of age, otherwise in robust health, was attacked with tremors about two years ago. No cause could be assigned for them; the man had been of regular habits and gave no history of syphilis. Nothing more could be learned than that he had been attacked by robbers some years ago, and had received a blow on the head, but he recovered from it without any lesions. The tremors were first observed in his gait so as to excite the suspicion that he had been drinking. Gradually they invaded the upper extremities so that he was unable to write, then the head began to oscillate and finally the tremors became general—the whole period of the symptoms covering about one year from the first onset of the disease. The tremors occurred only after muscular efforts and then became uncontrollable. There was no defect of vision, no nystagmus.

On account of the rarity and importance in a diagnostic point of view, the speaker presented the patient to the class. When questions were put to him he answered by dividing his words into syllables—in a *scanning* measure. Some of the students recognized the case at once as one of multiple cerebro-spinal sclerosis, though one student quite naturally took it for chorea. The diagnosis is to be made between these two diseases and paralysis agitans, which is not very difficult. In sclerosis of the brain and cord the tremors are in the line of muscular action, while in chorea they are irregular and in every direction. In paralysis agitans the tremors are constant, while in sclerosis they occur only during muscular efforts. Moreover, paralysis agitans generally occurs late in life, between fifty and sixty, while sclerosis belongs to adult life, between twenty and forty. The cause as well as pathology is obscure. All we know is that sclerotic patches are found in the brain or cord, or both, varying in size from a pin's head to a dime or even a quarter of a dollar. The disease depends on or is a chronic inflammation, but what induces it is not definitely known. An excuse for our want of more accurate knowledge of these conditions is the fact that this subject has been but recently studied, more particularly by the French and Germans. The prognosis as well as treatment is unfavourable. Nothing controls it except the constant current, chloride of barium, or nitrate of silver, and then the effect is only temporary.—*Cin. Lancet and Clinic.*

The Treatment of Pneumonia at Bellevue Hospital New York.—The motive of the general treatment of pneumonia at Bellevue Hospital is to sustain the powers and stimulate the functions of the patient till the comparatively brief and self-limited disease shall have spent itself.

The pulse is taken, rather than the temperature, as the gauge which best indicates the capacity for resistance, and an increase in its rapidity and diminution in its force are understood as a call for stimulants. The forms of stimulation used are to some extent subject to differences of opinion on the part of the visiting physicians, but all are agreed as to the value of whisky, and there is almost as much unanimity in their regard for the carbonate of ammonium. Digitalis is much used; but it is objected to by some, partly because experience seems to indicate that in some cases, when the crisis of the disease has passed, patients are left, after its use, in a condition less favorable for recovery, and partly from the theoretical consideration that this drug is not general enough in its action. Camphor has been employed by some as a diffusible stimulant.

The general treatment of pneumonia is then by simple stimulation. In special conditions, however, more is done. When the patient is first seen, if he is suffering from considerable pain, a few doses of morphia are recommended.

If the disease is seen at its outset, and if the outset is violent in character, one at least of the leading physicians on the visiting staff believes in the good effect of a few doses of aconite, but its use is not general in the hospital. The spirit of Mindererus, sweet spirits of nitre, calomel, and Dover's powder, are used by some in the first stage of the disease. Quinine is occasionally called upon to bring down the temperature when it rises to a serious height. One of the visiting physicians makes a special point of the importance of watching the kidneys and seeing they perform their duty well.

The appearance of œdema of the lungs finds all agreed upon the necessity of crowding the stimulants. But beyond this there are some differences of practice. They would be included in the use of dry cups, the hot pack, oxygen, and, in the few cases which are entirely suitable for it, bleeding.—*Medical Record.*

GUNSHOT WOUNDS OF THE VERTEBRÆ.—The exceedingly interesting paper on this subject, in this number, will be read with great interest and profit; more particularly, as such wounds are believed by the great majority, even of the well informed Profession, to be necessarily fatal. Such opinions have been so frequently expressed by physicians of prominence in medical and also in secular periodicals, in connection with the Garfield case, that every paper teaching a different and a truer lesson is to be appreciated.

In the thirty-two cases given in the History of the Crimean War, four recovered. In one hundred and ninety-one cases occurring in the French service thirteen recovered. In one hundred and eighty-seven cases reported by Confederate Surgeons, seven recovered. In one hundred and forty-nine Lumbar-vertebral cases reported in the "History of the Rebellion," fifty-one were discharged, and twenty-eight returned to duty; a mortality not absolute, but of 45-5 per cent. In sixteen reported cases of removal of the ball, only five died and seven recovered.

When such facts are considered, the report of the cure in this number becomes, in comparison, less astonishing, but the facts entire serve to increase the surprise which the unfortunate statements made in regard to Mr. Garfield's "inevitable death" have so extensively and injuriously created.

Gunshot wounds of the lumbar vertebræ are of course very serious, but when in 149 cases 79 have recovered, and when in 16 cases of operation, 7 have recovered, the late teachings on this subject are very far indeed from the truth. They are not only unjust, but libellous to Surgery.—*Am. Med. Weekly, Feb. 25, 1882.*

ACONITE *v.* SALICYLIC ACID IN THE TREATMENT OF RHEUMATISM.—Aconite has been very highly recommended in the treatment of rheumatism. I have given it in this disease with great advantage; and Dr. Murrell in his exhaustive letter on aconitine, or aconitia, in the *Journal* of April 15th, states that Gubler commends it highly for the relief of acute rheumatism and gout. I will briefly detail a case, at present under my care, where aconite had a fair trial and failed, and in which the value of salicylic acid was immediate, pronounced, and general. A woman, aged 26, was admitted under my care at the North West London Hospital, suffering from rheumatism of three weeks' duration; the temperature was 101° to 102°. The disease was complicated with nausea and symptoms of pericarditis, as well as with pains in the shafts of the long bones and erythematous eruption on the legs. On admission she was treated by the house-physician with a mixture the main ingredient of which was potassium iodide. This she took for several days, without any perceptible effect, till I put her on a mixture containing 2 minims of tincture of aconite, in combination with a little digitalis and 15 grains of bicarbonate of potash, to be taken every three hours for twelve doses. It slightly lowered the temperature after the first day only, caused a copious perspiration, but was attended with no beneficial effect, either as regards the pains, the palpitation, or the fever. This mixture, with one minim of the tincture of aconite, was continued for nine days, but with no other effect. I then gave 15 grains of salicylate of soda, in water, with the result that in three days the temperature was normal, the pain had disappeared, and the heart-symptoms greatly relieved. This confirms to some extent the statement of Dr. Maclagan that salicylic acid is not injurious to the integrity of that organ; and that, in cases when it appears to be so, the damage to the heart occurs in the natural and erratic course of the disease, often even before its manifestations in the joints become apparent.—DR. CULLIMORE *in Brit. Med. Journal.*

SYPHILIS TRANSMITTED TO THE THIRD GENERATION.—Mr. Jonathan Hutchinson (*Reynolds' System of Medicine,* Vol. 1, p. 431,) gives the following.—"A respectable young woman came to me about six months ago, on account of an inflamed eye. She had interstitial keratitis in a typical form, her teeth were notched, and her physiognomy characteristic. She told me she was suckling her first child, an infant of two months. I inquired if it were healthy. She said it was a fine baby and ailed nothing whatever. I asked her to bring it with her at her next visit. She did so, and on having it stripped, I found it covered with coppery blotches, with condylomata at the anus and snuffles at the nose. In subsequent treatments by mercury all these symptoms disappeared. There remains of course the source of fallacy that this child's parents, one or other of them, may have acquired syphilis. As to its father, I may state that he has long been under my treatment for sycosis, and that I have made the most detailed inquiry of him as to any venereal disease. I believe strongly that he has never had any. A fact which is perhaps of more value than his own statement, is that his sycosis has not been benefitted in the least degree by the iodide of potassium. Of course I have not ventured to insult him by inquiring into his wife's antecedents; but there is no reason to entertain suspicion in that quarter, while the fact that she is the subject of inherited disease makes it probable that she would not be liable to the acquired disease. Having, therefore, carefully balanced the evidence, I incline to believe that in this we have an instance of the transmission of syphilis to the third generation."

DEATH AFTER OVARIOTOMY DUE TO PREVIOUS TAPPING.—Mr. Lawson Tait drew attention to the

fact that amongst the last 100 ovariotomies (for cystoma) which he had performed, there had been only three deaths. In all, the deaths had been due to the formation of a firm white clot, which started from the point of ligature of the pedicle and slowly traversed the venous system until it reached the heart, death ensuing in from 30 to 40 hours after operation. The symptoms which preceded death were swelling of the legs, rapid rise of pulse and its disappearance from the extremities some time before death; breathlessness, ending in suffocation and slight delirium. He had seen several such deaths, but not one in a patient who had not been previously tapped. His explanation was that the repeated tappings deprived the blood of some element or elements included in the infinite variety of albuminous substances found in ovarian cysts, the deficiency of which predisposed to coagulation of the blood. The author thought that no case of ovarian tumor should be tapped till previous abdominal section had shown that it could not be removed. He believed if this rule was followed the mortality might be reduced to less than one per cent., if cases were operated on early; as long as the clamp gave a mortality of 25 per cent. it was right to stave off by all possible means so fatal an operation as ovariotomy.—*Midland Medical Society—Lancet*, Feb. 18.

Treatment of Comedones.—The black points, fleshworms or comedones, which are found in the face, and especially near the nostrils, are not at all produced by the accumulation of the particles of dirt or dust, as has generally been believed, but by pigmentary matter which is soluble in acids. It is known, in fact, that black comedones which accompany acne often appear not only on persons exposed to dust or rather careless of their person, but also on chlorotic young girls who live in good circumstances. Besides, observation shows that the discoloration not only exists on the surface of old comedones, but descends always to the lower parts. Accepting this fact, Dr. Unna, of Hamburg, has used, successfully, acids in the treatment of comedones. He generally prescribes:

℞—Kaolin,	4 parts.
Glycerine,	3 parts.
Acetic acid,	2 parts.

With or without the addition of a small quantity of some ethereal oil. With this pomade he covers the parts affected in the evening, and if need be, during the day. After several days all the comedones can be easily expressed, most of them even come out by washing the parts with pumice-stone soap. The same results can be obtained by bandaging the parts affected for a long time with vinegar, lemon juice or diluted hydrochloric acid. The author concludes by saying that the acids act like cosmetics, as they transform the black color into a brown and yellow shade, and destroy it gradually altogether; they produce a quicker desquamation of the horny bed which interrupts the exit of the comedones and brings to the surface the glandular openings.—*Cin. Med. News.*

Therapeutical Indications for Ergot.—Dr. E. Evetzky, (*New York Medical Journal*) sums up his views regarding the action of this drug, as follows:—

First: Disorders of the circulation and diseases of the organs of circulation. Second: Paretic conditions of the organs composed of organic muscular tissue, the circulatory system excepted. Third: Inflammatory and other morbid enlargements and growths. Fourth. Abnormal secretions. Fifth: Symptoms referable to the nervous system, and depending chiefly upon circulatory disorders within it. In regard to contra-indications to the use of ergot, it should be used with extreme caution in patients with an enfeebled heart. Pregnancy is not an absolute contra-indication. The use of the drug should be suspended during menstruation, unless it is given for some special condition of that function. To avoid disturbing the digestion it is best to give the drug by the rectum or hypodermically.

Iodoform for Soft Chancres.—In the *British Medical Journal*, Dr. Walter Whitehead says that iodoform appears to be one of the most efficacious drugs in the treatment of the syphilitic non-infecting soft sore, when not unduly inflamed. It has, however, the unfortunate counterbalancing disadvantage of attaching to the patient the liability of unenviable suspicion, the public having become keenly alive to its distinctive and penetrating odor, and having also acquired an appreciative knowledge of the principal purpose for which the drug is most frequently used. He has succeeded, he thinks, in obviating this objectionable feature, without, apparently, sacrificing any of the therapeutic advantages of the drug, by using it in the following manner: He first very carefully cleanses and dries the sores, by means of little pledgets of bibulous paper, and then, by means of a camel's hair pencil, applies freely over the surface of the sores a solution of iodoform in ether. The ether rapidly evaporates, and leaves the iodoform uniformly spread in an impalpable powder over the sores. To insure a free application, the latter part of the process may be repeated and allowed to dry. When perfectly dry, each sore is given a coating of collodoin, which is allowed to overlap, about a quarter of an inch, the area of each sore. Before the collodion has had time to dry, a pinch of absorbent cotton wool is placed on each patch, as a protection against the rough contact of clothing. This dressing is a lowed to remain undisturbed for twenty-four hours, when the firm film which forms may be gently removed and a fresh coating applied.

This treatment is continued day by day until all the sores have quite healed. He has found that a piece of gold beater's skin may be substituted for the collodion after the application of the iodoform. This process will suppress the odor, while a further advantage will be gained in the protection afforded by the collodion against auto-inoculation, and also against the risk of contagion from others coming in contact with the sores.—*Med. and Surg. Reporter.*

Thymol in Diphtheria.—Dr. Warren (*Le Progres Med.*) has employed the following formula with much success in diphtheria :—

Glycerin	70 parts ;
Chlorate of potash	10 parts ;
Brandy	250 parts ;
Sulphate of quinine	2 to 4 parts ;
Thymol	30 to 50 parts.

A dessertspoonful of this mixture may be given hourly or every two hours to children of two to five years of age. For older children the dose may be increased to a tablespoonful. It should be given as far as possible without the addition of water, as it then produces an excitant or even irritant action on the buccal mucous membrane. It may also be employed as a prophylactic remedy against diphtheria and malaria. It has also been used as a tonic with much success in cases of typhoid fever with diarrhœa, but in this condition a few drops of the tincture of iron should be added to each dose.—*London Practitioner.*

Operation in Cases of Diseased Joints in Phthisical Subjects.—Mr. Henry Smith, in a letter to the *Lancet* (November 12, 1881), confirms the views of Mr. Bryant, who has already spoken upon the above subject. Mr. Bryant does not think that an operation for the removal of a diseased joint in a phthisical patient is unwise, where the local disease is of such a nature as to prevent the recovery from the systemic disease. But apparently in such cases he confines his operations to amputation, while Mr. Smith does not hesitate to perform excision. The latter gentleman states that great benefit has resulted from excision in cases which he has observed. He mentions as an instance, a tailor, suffering from tubercular phthisis and extensive disease of the elbow-joint, who, after operation, was greatly benefitted as regards the phthisis and the joint disease. He also says that there are instances of lardaceous disease of the liver, where this condition will disappear after operation upon the hip-joint.—*N. Y. Med. Record.*

The *N. Y. Medical Times* has been added to our exchange list. It is devoted to the elucidation and support of the principles of *similia similibus curantur* in medicine, although it requires a somewhat careful examination of its contents to detect this fact. It has this to say regarding the use of the term "homœopath" : "The display of the title 'Homœopath' upon signs is rarely met with in these parts, and its use, we will admit, is only for purposes of notoriety and should be abandoned by such as have any degree of appreciation of good taste and of the dignity of that title which needs no modification, viz., Dr. of Medicine." And yet there are those who will refuse to recognize a man who can utter such a sentiment, as a physician ! We cordially welcome the *Times* to our table. It is withal a first-class journal....*Mich. Med. News.*

Torsion of Arteries.—At Guy's Hospital, the London correspondent of the Boston *Medical and Surgical Journal* says that all the surgeons use torsion to the exclusion of the ligature, except in very small vessels where it is difficult to isolate the vessels from muscular fibres. They give a very large statistical showing in its favour. He has seen every kind of amputation there except of the hip-joint, and never a ligature applied except to a large vessel. They use no transverse forceps, but seizing the cut end of the vessel with strong forceps, twist it till it is felt to "give way," that is, the two inner coats break. He has often seen six and sometimes ten complete turns given to the femoral artery. Mr. Bryant said : "Doctor, theoretically the twisted end ought to slough off, but practically it never does. We have to talk to our students about secondary hemorrhage, but we do not show it to them." Mr. Lucas told him that for a long time they have ceased to dread, or look for secondary hemorrhage. —*Chicago Med. Review.*

Treatment of Obstinate Constipation by Extract of Calabar Bean.—Calabar bean administered to an animal produces tetanic spasms of the muscular tissues of the bowel, resulting in expulsion of the intestinal contents per anum. This fact suggested to Dr. Schæfer the idea that the drug might prove useful in obstinate constipation, due to atony of the muscular coats of the intestine, such as is often observed in women and in old men. The results of this mode of treatment are reported as satisfactory. The following is the formula of the preparation employed :—

Extract of Calar bean	0.05 gramme.
Glycerine	10 grammes.

Six drops to be taken every three hours during the day. Under this treatment constipation has been overcome within twenty-four hours.—(*Bert. Klin. Wochenschr.*) *Journal de Thérap.* 10th February, 1882.

Gastric Resection.—Billroth did not perform his prospected gastric resection in Bordeaux, as the patient died upon the day of his arrival. The

autopsy revealed an error in diagnosis, the stomach being found perfectly normal, while the gall-bladder was filled with calculi.

For the journey, Billroth received 12,000 florins, while 3,000 florins were apportioned to each of his assistants, Drs. Wolfler and Gersnay.

A slight idea of the enormous quantity of operative surgery Billroth performs, can be formed from a recent Sunday forenoon's labour. In that space of time, he removed two ovarian tumors and extirpated two uteri. The four patients survived the operations. His usual daily operation duty at the "Allegemeine Krankenhaus" is two and one-half hours.—*Cor. Med. News.*

A Sedative Emmenagogue.—For a day or two antecedent to the actual commencement of the catamenial flux, not infrequently women suffer acute pain in the pelvic region, doubtless due to hyperæmia and hyperæsthesia of the reproductive belongings. To obviate this I have found no treatment give such satisfactory results as the following:

R—Codeiæ sulphatis, gr. j.
Chloral hydratis,
Ammonii bromidi, aa gr. xx.
Aquæ camphoræ, ℥j.—M.

Sig.—The above dose to be taken at bed-time.

A repetition of the dose at *that* period is rarely necessary. In some cases a warm sitz-bath of fifteen minutes' duration before retiring, is a valuable adjuvant.—*Western Med. Rep.*, March, 1882.

Doctors in Canadian Legislatures. — In contrast to England, where not a single constituency is represented by a member of the profession, Canada appears to have an unusual number of medical politicians. In the Dominion Parliament there are, in the Senate, 6; in the House of Commons, 16; of these, one, Dr. Blanchet, is Speaker of the House, and Sir Charles Tupper (M.D., Edin.) is Minister of Railways. In the Provincial Legislatures, Nova Scotia has 3; New Brunswick, 2; Manitoba, 2; Ontario, 10; and Quebec, 10. In the last-named province, the Lieutenant-Governor is Dr. Louis Robitaille, and the Minister of Agriculture, Dr. Ross.—*Med. News.*

Resignation of Prof. Gross.—On the 17th ult., Prof. Samuel D. Gross tendered to the Trustees of the Jefferson Medical College his resignation of the professorship of surgery which he has held in that institution for twenty-six years. Dr. Gross is seventy-seven years of age, and, although still in the enjoyment of vigorous health, recognizes the wisdom of lightening his labors with advancing years. Dr. Gross's world-wide reputation as a surgeon, and popularity as a lecturer, have justly attracted large numbers of students to Jefferson School, and his resignation is a serious loss to the Faculty and to medical education in Philadelphia.—*Med. News.*

Turpentine and Carbolic Acid in Typhoid.—Dr. J. F. Peace *(Med. Brief)* reports fifty-four cases of typhoid fever, of which 30 were treated with carbolic acid, given in one to three drop doses, three to four times per diem; and twenty-four were treated with turpentine, given in five to ten drop doses, three to four times a day. The duration of the disease was shortest in those treated with carbolic acid, and they all recovered. Of those treated with turpentine two died. The supporting treatment was the same in all.—*Chicago Med Review.*

Bladders of Ice in Mammary Abscess.—Dr. Hiram Corson *(Am. Four. Obstet.)* speaks in high praise of applications of ice in bladders to inflamed mammæ to prevent abscess, or even if abscesses have formed, to limit the destructive process. He has followed this practice for twenty-seven years, and in no instance, if suppuration has not already taken place, has he failed to disperse the inflammation at the same time that he brought comfort to the patient.—*Pac. Med. & Surg. Four.*

Acute Bronchitis:

R—Vini Ipecac.....℥ij
Potassii Citratis.....℥iv
Tr. Opii Camph.....
Syrup Acaciæ .....aa ℥j

M. Sig.—Tablespoonful thrice daily in the first stages of ordinary acute bronchitis.—*Dr. Da Costa.*

How Lawyers are Sometimes Made.—The *Alienist and Neurologist* cities from Prichard the well known case of the three congenitally idiotic brethren; one of whom received a blow on the head which brightened him up a little and he became a lawyer. The trouble is, some congenital idiots become lawyers without getting a blow on the head to brighten them up.—*Chicago Med. Review.*

The Legal Position of a Professor in a college, according to a recent decision of the Supreme Court of Pennsylvania, is merely that of an employee. He can be summarily dismissed at any time, therefore, by the corporation owning the college.—*Philadelphia Medical Times.*

Epilepsy.—Dr. Allen McLane Hamilton's prescription for epilepsy:

R. Strychniæ sulph., gr. j.; fl. ext. ergotæ, ℥ ss.; liq. potass. arsenat., ℥ ij; sodii bromid., ℥ ss.; tr. digitalis, ℥ iij.; aquæ menth. pip. ad, ℥ iv. M.

Sig.—A teaspoonful, before eating, in a half tumblerful of water.

EPYEMA—FREE INCISION v. ASPIRATION.—A correspondent of the *British Med. Journal* reports the following case:—James W., aged seven years, was seized with a pleuro-pneumonia, from which he apparently recovered and began to run about. Twenty days after he had been last seen his father came (he lived about five miles in the country), and complained of the boy's breathing becoming more and more embarrassed. The little patient was again seen, and dulness had returned to the left side, the side originally affected, and breathing was more hurried. He was blistered and put on diuretics, but still the symptoms of compressed lung increased, and no doubt was entertained but that he was suffering from empyema; and on September 3rd his breathing was forty-five to fifty per minute; pulse so quick that it could not be counted; complexion livid. Thirty-five ounces of pus were drawn off by means of the aspirator, with of course immediate relief to the patient. For two days the little patient improved, but diarrhœa, a distressing symptom from the first, still continued. After this, however, he became more restless toward evening, and dulness increased, so that on the seventh day after, the operation had to be repeated, and with a result differing from the former only in the quantity (thirty ounces) of pus withdrawn In thirty-five days the operation was repeated five times, and nearly two hundred ounces were taken from the cavity. After each operation the patient experienced great relief, and improved, though so slowly that it was deemed advisable to make a free incision. This was done between the fourth and fifth ribs, about one inch and a half posterior to the mid-axillary line, and a drainage-tube inserted. The child improved every day after this operation; and a very notable feature in the case, the diarrhœa, which had hitherto baffled every attempt to arrest it, ceased.

The wound in the chest-wall soon healed, and when last seen, with the exception of the left side of the chest being flat, the boy looked and felt well.

No antiseptics were used, so that the admission of fresh air into the pleural cavity is not so much to be dreaded as pent-up matter.

TREATMENT OF PERTUSSIS.—Dr. Forchheimer (*American Journal of Obstetrics*, January, 1882) has adopted Letzerich's treatment of pertussis with insufflations of quinine, using one gramme of quinine and half a gramme each of pulverized acacia and soda bicarbonate, divided into ten powders; one powder is blown into the throat twice daily. He claims, after a very logical and critical examination of his results, embracing the treatment of ninety-two cases, as compared with those of other authorities, that his method corresponds to an ideal one in the following particulars:—First: A positive effect is produced on the duration of the disease. Second: A positive effect is produced upon both the number and intensity of the paroxysms. Third: Complications and sequelæ are diminished. Fourth: Mortality is very much reduced. Fifth: Its prophylactic action must as yet be considered doubtful, yet the treatment requires more thorough testing.—*Chicago Med. Review.*

PERSONS WHO USE FURS AND FOOD preserved in tin cans have been found to suffer eventually from gastric trouble. This, it is asserted, is due to stannous compounds which are extremely irritant. Mr. Edison is reported (*Science*) to have invented a method of preserving articles of food in glass vessels from which the air has been exhausted and a high vacuum produced. The glass vessel is then hermetically closed by sealing off the channel to the air-pump, the envelope produced being essentially a homogeneous piece of glass. This invention appears to meet the difficulty experienced in the use of tin cans.

CLASSIFICATION OF MEN.—Hesiod said that in his day there were three kinds of men—those who understand things of themselves, those who understand things when they are explained to them, and those who neither understand things of themselves nor when they are explained to them. That was the classification in Greece over two thousand years ago, but it is a convenient one for use even now; and when a man has settled for himself to which class he belongs, his education has taken a long stride.—*Billings.*

Another successful gastrotomy was recently performed by Prof. Albert, of Vienna, upon a boy, aged eleven, who suffered from stricture of the œsophagus brought on by swallowing caustic potash. The case was exhibited before the Society of Physicians in Vienna.

BASHAM'S MIXTURE IN ALBUMINURIA.—This old-fashioned formula still holds a prominent place in the treatment of renal disorders. Its composition is as follows:—Tr. ferri. chlor. ℥ss.; acid acetic dil. ℥j.: liq. amm. acet. ℥ivss.. tr. aurant. cort, ℥iss.; glycerinæ ℥ss.—M. Sig. A tablespoonful, largely diluted three times a day.

FATTY HEART IN DIPHTHERIA.—Prof. Leyden, President of the Berlin Medical Society, thinks that there is a fatty degeneration of the muscular fibres of the heart, with abundant cell-proliferation, in diphtheria.

PURPURA.—℞. Vin. ferri., ℥ iv.; liq., arsenicalis min. xx.; syr zingiberis, ℥ ij.

M. Sig., one-sixth part, with three tablespoonfuls of water three times a day, after meals.—*Med. Gazette.*

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.*

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MANTER, 16 Rue de la Grange Bateliere, Paris.

TORONTO, JUNE, 1882.

This Journal has the largest circulation of any Medical Journal Canada.

CHAIRMAN ONTARIO BOARD OF HEALTH.

Our contemporary "the organ of the Toronto School of Medicine," with its usual one-sidedness comes forward in the last issue with a long bill of indictment against the editor of the LANCET, for daring to exercise his undoubted right of criticizing the qualifications of the Chairman of the Ontario Board of Health. The recently appointed Chairman of the Board is a colleague, and therefore must be defended at all hazards; for is not the existence of the "organ" for the benefit of the School and those connected therewith? Nor do we find any fault with the "organ" for so doing, but when, in order to defend a colleague, the editors so far forget what is due to themselves and the School they endeavour so faithfully to bolster up, as to make statements which they knew to be incorrect, impute unworthy motives, and retail "street gossip," it is incumbent on us to speak out more freely on the subject. Through the thin mask of the *nom de plume*, "Junius," the editors make statements which they were no doubt ashamed to make more openly. They knew, or ought to have known before publishing such a statement, that the "editor of the LANCET" was not an applicant for the Chairmanship of the Board of Health. That public gossip had mentioned our name, as well as the names of several other gentlemen in this city, in connection with the Chairmanship of the Board, and that a very warm and influential friend in the House pressed us to apply for the position, we do not pretend to deny; but that we made application for the position, or were disappointed in not getting it, is utterly and absolutely without foundation. We have neither the leisure nor the inclination, to engage in any more work than we have on hand at present. There was not, therefore, any rivalry between us, nor do we consider him a rival in any sense.

Having thus disposed of that portion of the indictment in regard to our criticism, we will now state, in answer to the challenge of the "organ," the grounds upon which we were opposed to his appointment. We stated in the article which gave such mortal offence to the "organ," that while we did not approve of the selection of the chairman, believing him not to be a thoroughly practical man, we were desirous of giving him a fair trial. This was "the head and front of our offending, nothing more." We still think, that in the interest of the public and the profession, it would not have been prudent to say more; but his injudicious friends seem to think otherwise. The "organ" states that the chairman needs no defence among his professional brethren in Toronto. We venture to state, on the contrary, that there are not half a dozen medical men in Toronto, outside of the small "charmed circle" of which the "organ" is the central pivot, that will assert that he is a practically competent man for the position. Neither is he, in any sense, the choice of the profession in Toronto, as the "organ" would have its readers believe. He forced himself upon the attention of the House and the Government, by most persistent lobbying, and the presentation of petitions which he carried about the city for signatures, and thus secured for himself a position for which he has neither the leisure, nor the practical qualifications to properly fill. He, at present, holds a subordinate position in University College, as lecturer on "Italian," fills the office of "Curator of the Museum," and lecturer on "Sanitary Science" in the Toronto School of Medicine, and does some occasional work in the "Ontario Veterinary College," together with general practice. It is therefore impossible to expect that he can have sufficient leisure to do justice to the position, even if he possessed the necessary qualifications. With reference to his practical qualifications, we judged him entirely by his own record. It will be in the recollection of some of our readers who were cognizant of the facts at the time, that when asked, in common

with a number of his fellow-practitioners in this city, by a committee of medical men in the House, to give his views upon the public health question, and the best mode of procedure to induce the Government to provide for the establishment of the Provincial Board of Health, he treated the committee to a long dissertation about the drainage, or something of that sort, of Osgoode Hall, a matter entirely foreign to the subject in nand. His communication was laid on the table, with the remark by the chairman, that it had no reference whatever to the question under consideration. We would also refer the "organ" to his report upon some method of improving the sanitary condition of the City Hall.

The *Mail*, of February 4th, 1882, referring to this report, stated that "the Dr. gave it as his opinion that the only remedy which *presented itself to his mind* was to have new buildings erected." There was not a suggestion offered by this "eminently practical man" as to improving the sanitary, or rather unsanitary, condition of the present buildings. We have been told by practical men that the buildings—while not the best for the purpose—could at moderate expense be placed in a perfectly healthy condition.

It was the knowledge of such facts as the above, and others of a similar character, that might be mentioned, which shook our confidence in the ultimate success of the measure under his chairmanship, and led us to decline a seat on the Board, which was very strongly pressed upon us by the Registrar-General, and which also led us to say that "we did not approve of the appointment." If anything further is needed to show that we had good grounds for our statement we would refer our readers to his published address to his colleagues on the Board. Instead of proceeding at once to the work in hand, as a practical man would have done, he delivered a long address to his colleagues, a large portion of which referred to what had been done by sanitary reforms, which it is to be hoped for their own sake as well as the public, the members of the Board are quite as familiar with as the Chairman. It might have been well enough at a meeting to instruct a number of mechanics, but it was absurd and altogether useless and out of place as an instruction to his colleagues. The plea that the address was intended for publication in the *Mail*, does not alter the facts.

At the instance of the Hon. Mr. Hardy, two members of the Board visited Sarnia, and reported in reference to the cause of the outbreak of typhoid fever in that place. Even this judicious action on the part of the Government was not a sufficient hint to the Chairman of the Board to lead him to direct an enquiry into the cause of the recent epidemic of a similar nature in Toronto. If there had been a practical man to direct the affairs of the Board, it surely would not have separated without an expression of opinion with regard to our own impure water supply, or a recommendation with reference to the danger to the health of the city by the contemplated closing up of the Eastern gap of the bay.

LABOUR EMPLOYMENT REGULATION BILL.

A bill to regulate the employment of labour in workshops, mills and factories, was introduced in the Dominion Senate during the past Session.

A somewhat similar bill was introduced during the Session previous to the last, in the House of Commons, by Dr. Bergin, but was not pressed because of the limited information in possession of the House. A Commission was appointed by the Government, consisting of two gentlemen who spent considerable time during the recess, in collecting information. They visited 465 factories in different parts of the Dominion, especially in Ontario, Quebec, Nova Scotia. and New Brunswick. They found that the number of persons employed in these factories was about 43,000, of whom, 2,000 were children under ten years of age.

The report of the Commissioners which was laid before the Senate, gave in a very concise form, information which will be of great value in enabling the Government and the public to form an intelligent opinion with regard to the labour employed in factories and the small degree of protection afforded to those engaged in such employment. It was found by the Commission that the hours of labour varied very much in the different factories. In 48 of these factories the employés worked over ten hours per day ; in 167, ten hours per day ; and in 250, less than ten hours per day.

With reference to the sanitary condition of the

factories and health of the employés, the Commissioners seem, from the report, to have paid but little attention to this part of their work. While some of the large factories were everything that could be desired in this respect, many of the smaller ones, such as tobacco factories and others of that class, were far from creditable to the age in which we live. It was also found that in a large number of factories, one hour was allowed for dinner, but in a number of others it varied from half an hour to 50 minutes. The report of the Commissioners also showed that the provision made for urinals and other conveniences, in many of the factories was very imperfect. The same was also true with regard to means of escape in case of fire.

The principal provisions of the bill are as follows:—It provides that the hours of labour shall not exceed ten hours per day, or 60 hours per week. With regard to children of 10 to 14, the hours of labour are fixed at 30 per week, and shall not exceed eight hours per day. The bill fixes the time allowed for dinner at one hour; and provision is made that no operative shall be allowed to take meals in a room where any manufacturing process is carried on; and every employer is obliged to provide a suitable room within the precincts of the factory, in which the employés can take their meals. With regard to sanitary provisions, it requires that every factory shall be ventilated in such a way as to render harmless the vapors, dust, etc., generated in the manufacturing process carried on in them. It also provides that suitable arrangement for water-closets be made. The bill further provides that fire escapes shall be erected, and that all belting, shafting and gearing, be so covered that operatives may not come in contact with them, and that hoists, trap-doors, etc., be properly closed and guarded. The Governor-General in Council may from time to time make ordinance for enforcing the Act, by the appointment of one or more Inspectors. Penalty clauses are also inserted for any infraction of the law.

Although the measure is largely a tentative one, it cannot fail to have a most salutary effect upon the sanitary condition of factories, and on the health of employés. The introduction of the bill in the Senate occasioned a lively discussion, in which the medical men in the House took an active part. Hon. Dr. Almon, of Halifax, administered a well-merited rebuke to the legal members for their great readiness in expressing opinions on matters which come more especially within the province of medical men.

REPORTS OF ASYLUMS FOR INSANE.

We have before us the reports of the medical superintendents of asylums for insane in this Province, for the year ending Sept. 30th, 1881, from which we glean the following information:—In the Toronto Asylum there were, at the close of the year, 673 patients, or 11 more, the Superintendent states, than they had beds for. During the year there were 762 patients under treatment. Of that number 88 were admitted, 54 were discharged (40 of them recovered and 8 improved), and 35 died. The per centage of recoveries on admissions during the year is about 45 per cent. as against 19 per cent. last year. In the London Asylum there were, on the 1st October, 1880, 784 patients in residence. During the year, 970 were under treatment. Of the latter, 73 were discharged, 38 died, 4 eloped, and 3 were transferred to other asylums, leaving in residence, on the 1st Sept., 1881, 852 patients. Of those discharged, 47 were recovered, 13 improved, and 12 unimproved. The number discharged recovered and improved was 60, or about 32 per cent. of the admissions, as against 36 per cent. last year. But, as Dr. Clarke very properly says in his report, the per centages fluctuate in asylums from year to year. In the Kingston Asylum there were in residence, on the 1st October, 1880, 433 patients. The total number under treatment during the year was 488; of these, 21 were discharged and 21 died during the year, leaving 446 remaining in the Asylum on 30th Sept., 1881. Of those discharged, 10 were cured, 10 improved, and 1 unimproved. In these three asylums there were confined, on the 1st Sept., 1881, no less than 1,971 patients, to which must be added those in Hamilton and Orillia, which foot up a very large total for the Province of Ontario. Besides, the universal cry of the superintendents is, More room, more room! The Toronto Asylum is pressed to its utmost capacity, and even far beyond what is reasonable or just to the present inmates, to accommodate the increasing number of applicants, and the Government will be obliged, however unwilling, before long to provide additional accommodation. Where

there has been so much crowding, it is matter for wonder that the superintendents have not had to report the occurrence of serious endemics or a greater number of casualties among the more irresponsible class of inmates.

In glancing over the Inspector's reports, or "Minutes of Inspection recorded during the year," —we presume they were *minutes* of inspection— we were very much impressed with the patronizing way in which that officer dealt with the subject, and the very free use he seemed disposed to make of the services of the "Medical Superintendents." No matter what little detail in his opinion required attention, it was noted down, with the remark that the "Medical Superintendent was required to see that it was attended to;" "the attention of the Medical Superintendent was called to this;" "the Medical Superintendent was instructed to have proper books prepared;" "the Medical Superintendent was requested to give his personal attention to the matter," etc., etc. Any person not acquainted with all the facts, and not knowing the character of the medical superintendents of the respective institutions for energy, fidelity to trust, and faithfulness in the performance of their duties, would infer that they had been guilty of gross carelessness, not to say criminality, in the discharge of their duties. It is the most complacent piece of self-glorification we have seen for many a day, and we cannot but think these gentlemen whose names are so freely used to magnify the value and importance of his inspection, will heave a sigh of relief at the thought that his great talents have found a more fitting occupation.

TRINITY MEDICAL SCHOOL.

The annual meeting of the Trinity Medical School for the conferring of diplomas, awarding of medals, scholarships, certificates of honor, etc., was held on the 8th ult., Dr. Geikie in the chair. The proceedings were opened by the Provost, Rev. W. E. Body, reading prayers, after which Dr. Kirkland announced the names of those candidates who had passed the first year's examination, 56 in number. Their names appeared in the May number of the LANCET.

Dr. Kennedy presented the certificates of honour for standing in the primary branches, stating that the contest had been very keen, neither of the successful candidates having far outstripped the others. The men who procured this distinction were J. E. Jenner, E. H. Williams, T. H. Robinson, and B. H. Scott.

Dr. Fulton read the names of those who had passed the primary examination, 26 in number, remarking that it was acknowledged to be very severe, the object of the faculty in making it so being to avoid, so far as possible, the failure of students in the succeeding and more important examinations.

SCHOLARSHIPS.—First year's scholarships: W. M. Brown, *first scholarship;* F. Snellgrove, *second scholarship.* The "second year's scholarship" was equally divided between E. Jenner and E. H. Williams.

PRIZES.—The "Baptie" prize in chemistry was won by E. H. Williams. F. H. Sawers received the prize in materia medica, given by Dr. Kennedy, and B. H. Scott a special prize for high standing in the same department.

FELLOWSHIP DIPLOMAS.—*Honor men:* W. H. McDonald, A. C. Gaviller, A. D. Smith, W. Bonnar, A. Cameron, H. H. Graham, W. Hanbidge, J. M. Johnston, J. Johnston, H. P. McCausland, J. T. Sutherland. *Passmen:* R. W. Belt, W. N. Brett, T. W. Duncombe, J. A. Gracy, S. A. Metherell, J. A. Urquhart, J. E. Shore, P. J. Strathy, and J. D. Wilson.

MEDALLISTS.—Trinity Gold Medallist, W. H. McDonald; first Silver Medallist, A. C. Gaviller; second do., A. D. Smith.

Dr. Covernton, in presenting those who had passed the final examination, said it gave him great pleasure as one of the examiners to testify to the unusual excellence of the papers prepared by the students during the past course. The two men whose names stood first on the list were the best men ever up at the school.

The Rev. Provost presented the gold medal to the recipient and congratulated him on the excellence of his examination, having attained the very high proportion of 97 per cent.

Dr. Fulton in presenting the first silver medal, alluded to the ability of the recipient in complimentary terms, and took occasion to advise those successful competitors who could do so to spend a few years in the study of pathology in Europe,

before settling in Canada, with the object of making themselves familiar with the most recent developments in science. New discoveries were daily being made, and he believed that in no other way could the faculties of the students be so quickly and fully developed. He also urged them to endeavour to excel in their profession, and not content themselves with securing a mere competence as practitioners.

Dr. Covernton presented the second silver medal with a few appropriate remarks.

Dr. Geikie, Dean of the Faculty, then admitted the successful final candidates to the fellowship of the school, endorsing in his address to the new doctors the suggestion of Dr. Fulton as to gaining all the knowledge they possibly could by travel before settling down to the business of their life in the Dominion.

Ontario Medical Association.—The following is a list of papers to be read at the meeting of the Ontario Medical Association, June 7th and 8th—as far as received by the Secretary up to the 25th ult. :—Adenoma of the Pharynx—Dr. Ryerson, Toronto ; Antiseptic treatment of Phthisis—Dr. Philip, Brantford ; The Science of Medicine—Dr. Curry, Rockwood ; Treatment of Laceration of the cervix uteri—Dr. Temple, Toronto ; Hemorrhage after tonsillotomy—Dr. Powell, Edgar ; Therapeutics of Insanity—Dr. D. Clark, Toronto ; Trachelorrhaphy—Dr. Snow, New York ; Reports of Cases in Surgery—Dr. Dupuis, Kingston ; Locomotor Ataxia with Case—Dr. Stewart, Brucefield ; Light in Schools—Dr. Palmer, Toronto; Venesection — Dr. Clark, Oshawa ; Remarks on, and exhibition of case in surgery—Dr. Canniff, Toronto ; The relation of Local Boards to the Provincial Board of Health—Dr. Yeomans, Mount Forest ; Alcohol in disease—Dr. Bruce Smith, Sparta ; A case of Eclampsia—Dr. Harrison, Selkirk ; Treatment of Diphtheria, Dr. Mackelcan, Hamilton ; Some points on measurements in surgical practice—Dr. Oldright, Toronto ; Remarks on the Vital Statistics of Ontario—Dr. Playter, Toronto ; Retroversion of the Uterus—Dr. Harris, of Brantford. Besides these, reports on the various departments of the science will be forthcoming—and, judging from the *personnel* of the Committees, much may be expected from them. From present indications there is every reason to believe that this meeting will be largely attended.

University of Toronto Medical Examinations.—The following are the results of the recent examinations in the Faculty of Medicine :—*First year.*—H. Bascom, C. H. Britton, A. Broadfoot, E. Bourke, L. Carr, G. A. Cherry, F. W. Cane, J. D. Courtney, W. A. Goodall, H. N. Hoople, A. B. Kinsley, C. A. Crick, D. Minchin, D. Poole, M. R. Saunders, J. E. Sutherland, D. M. Stabler, H. E. Webster, J. W. Paterson, S. Stewart (J. H. Howell, *ægrotat* standing). Scholarships.—1st, H. N. Hoople ; 2nd, L. Carr. *Second year.*—J. Bray, J. W. Clarke, J. S. Draper, R. Hearn, J. Johnston, T. D. Michael, A. F. McKenzie, J. W. Paterson, R. L. Stewart, S. Stewart, J. Spence, A. S. Thompson, W. H. Johnston, T. M. Milroy, W. H. Oliphant. Scholarships.—1st, J. W. Clarke ; 2nd, A. F. McKenzie. *Third year.*—H. S. Clarke, F. J. Dolson, J. E. Hansler, J. A. Meldrum, W. J. Robinson. Scholarships.—1st, W. J. Robinson ; 2nd, F. J. Dolson. Primary.—W. H. Carleton, W. F. Freeman. Final.—W. J. Charlton, R. Coulter, A. J. Freel, R. S. Frost, W. Gilpin, H. P. Jackson, J. G. Mennie, A. D. Nasmith, J. W. Rae, S. R. Rogers, J. E. Shore, P. C. Walmsley. *Fourth year.* J. F. Bell, G. S. Cleland, J. T. Duncan, W. F. Eastwood, R. M. Fisher, W. Hanbidge, W. H. Johnson, E. G. Knill, F. D. Kent, J. Lafferty, T. M. Milroy, T. F. McMahon, W. H. Oliphant, A. C. Panton, R. R. Wallace. University gold medal.—R. R. Wallace. University silver medal.—J. F. Duncan. Starr gold medal.—R. R. Wallace. Degree of M.D.—J. Anderson, M.B.

University of Trinity College, Toronto.—The convocation for conferring degrees in medicine of this university was held on the 10th ult. The following are the names of the graduates :

Degree of M.B.—A. C. Gaviller, gold medallist ; J. M. Johnston, silver medallist.

Certificates of Honor.—A. C. Gaviller, J. M. Johnston, W. H. Macdonald, A. D. Smith, J. T. Sutherland, J. Johnston, W. M. Brett, P. J. Strathy, J. W. Ray, T. M. Milroy, H. H. Graham.

Passmen.—H. H. Atkinson, R. W. Belt, F. D. Canfield, T. W. Duncombe, J. G. Davidson, J. A. Gracey, J. W. L. Hunter, W. Nattress, A. F. Pringle, J. Urquhart, H. C. Wilson, J. D. Wilson, E. R. Woods, D. McLeod.

M.D., C.M.—H. P. McCausland, J. Walker, F. E. Woolverton, F. C. Astley, J. C. Urquhart, G.

McLain, A. H. Ferguson, W. Honeywell, J. D. Bonnar, J. A. McNaughton, C. M. Freeman, T. H. Stark, R. J. McKinnon and R. A. Ross.

M.D.—R. B. Nevitt and R. Raikes.

Bad Taste.—The Toronto School of Medicine organ of this city still persists in endeavoring to stir up bad feeling between the members of the Homœopathic and the regular profession in Ontario. This is, to say the least, in very bad taste. The position of these two bodies is very different in Ontario, from what it is in any other part of the world. The Homœopaths are incorporated by Act of Parliament with the general profession; representatives of both bodies sit together in the same council and make laws for the government of the profession as a whole. They are also associated together in the recently formed Provincial Board of Health, and therefore good taste and good policy both demand that there should be no unnecessary bitterness of feeling introduced. There certainly appears to be no good reason for all this abuse. No one can charge the Ontario Homœopaths with being aggressive, for, since the Act incorporating them with the general profession came into force, only a very few members of that school have been licensed to practise medicine in this Province. Surely those who are so conscious both of right and might, can afford to be a little more magnanimous.

The Bacilli of Tubercle.—At a recent meeting of the Physiological Society of Berlin, Dr. Koch gave a description and demonstration of organisms discovered by him in connection with tuberculosis. These organisms were detected by means of a peculiar process of staining which is given in detail in the *Lancet*, April 22nd, 1882, and by examination under very strong illumination. The tubercle bacilli as described by Koch, are seen as very small rods, one ten-thousand of an inch in length, and one sixty-thousandth of an inch in breadth. In some of them distinct spores may be seen. Koch found these organisms in tuberculous cavities and the sputum of phthisical patients. They were more numerous in recent tubercle than in old caseating centres. He performed a number of culture experiments in order to prove the identification of these organisms with tuberculosis, and the results were most striking. These observations have been subsequently confirmed by an independent investigation by Baumgarten. If well-founded, it is impossible to overestimate the importance of this discovery to medical science.

Maltine and Lactopeptine.—We know of few articles more indispensable than those above named to the therapeutic *armamentarium* of the progressive physician, and we are glad to learn, from circular now before us, that both preparations have grown so largely in the esteem of the Canadian profession as to have rendered it necessary to establish a branch house in Canada, for the purpose of more satisfactorily meeting the existing and increasing demand. The fact stated proves that the value of the preparations is too fully recognized to require further endorsement from us at this time. We would say, however, that both houses interested, especially merit support, inasmuch as it has been a cardinal principle in the conduct of their business to keep their preparations strictly in the hands of the profession, a point of which, perhaps, the importance is not sufficiently recognized. While this "unwritten law" is ostensibly observed by manufacturing pharmacists generally, we regret to say that it is in too many cases kept only in the letter, while flagrantly violated in spirit—in illustration of which we may give some facts on another occasion.

Mr. Gisborne, a gentleman for many years connected with the Home Office, will have charge of the Canadian business of the firms alluded to. He has opened an office at No. 10 Colborne Street, and we have no doubt will make the Toronto house as congenial a centre as are the New York offices to physicians visiting the American metropolis. We extend to Mr. Gisborne a hearty welcome, and wish him the full measure of success due the important specialties he represents.

University of Queen's College. — The following is a list of the graduates in medicine of Queen's College, Kingston, Ont. :

M.D.—R. S. Anglin, Kingston; A. D. Cameron, Lancaster; A. P. Cornell, Portsmouth; H. N. Coulter, Aylmer; G. H. Denike, Fulton, N. Y.; J. M. Dupuis, Kingston; R. W. Garrett, Kingston; C. E. Jarvis, Nilestown; H. K. F. Koyl, Ada, Minn.; H. N. Macdonald, Cape Breton; A. A. Mordy, Almonte; J. L. Reeve, Clinton; D. B.

Rutherford. Belleville; J. M. Stewart, Portsmouth.

C.M.—G. Clinton, M.D., Deseronto; C. R. Dickson, M. D., Wolfe Island; W. H. Henderson, M. D.; Dr. W. J. Gibson, B.A., of Belleville also received the degree of M.A.

Medical Candidates for Parliamentary Honors.—There seems to be an unusual number of medical men brought out as candidates for Parliamentary honors, in the approaching Dominion elections. The names of those already announced are as follows:—Dr. Wilson, East Elgin; Dr. Landerkin, S. Grey; Dr. Sproule, E. Grey; Dr. Sullivan, Kingston; Dr. St. Jean, Ottawa; Dr. Platt, Prince Edward; Dr. Ferguson, Welland; Dr. Chamberlain, Dundas; Dr. Sloan, E. Huron; Dr. Springer, S. Wentworth; Dr. Simson, Kent; Dr. Bergin, Stormont; Dr. Bowlby, N. Waterloo; Dr. Gravel, Beauce, Dr. Lesage, Dorchester, Dr. St. George, Portneuf, Que.; Dr. Borden, Kings, Dr. Forbes, Queens, N.S.

Dr. J. Hodgen, of St. Louis, a prominent surgeon, died suddenly on the 28th of April, aged 57 years. He was President of the American Medical Association in 1881.

The death on the 6th ult. of Prof. James R. Wood, of Bellevue Hospital Medical College, is announced in our medical exchanges.

New Jersey State Medical Society.—The resolution refusing to recognize the delegates from the New York State Society was rejected by a two-thirds vote.

Farewell Banquet.—A farewell banquet was tendered to Dr. S. C. Corbett, by the citizens of Port Hope, on the eve of his departure for Winnipeg, Man., on the 6th ult. The Mayor occupied the chair, and the evening was most agreeably spent in toasts and sentiments of kindly feeling towards the Dr., who had labored among them for several years. He carries with him not only the best wishes of the people of Port Hope and vicinity, but also the kind regards of many professional and lay friends in different parts of the Province.

Royal College of Physicians, Edin.—John Campbell, M.D., C.M., (McGill College,) of Seaforth, Ont., has passed the necessary examination for the degree of L.R.C.P., Edin.; also, Dr. G. A. McNutt, of Darnley, P. E. I., and Geo. N. Whelan, of St. Johns, Nfld.

W. F. McLean, M.B. (Trinity College, Toronto), has taken the double qualification of Licentiate of the Royal College of Physicians and Surgeons, of Edinburgh.

Victoria Medical College.—The following gentlemen received the degree of M.D., C.M., at the recent convocation in the above named University:—W. H. Aikins, R. J. Burton, R. M. Coulter, J. T. Carroll, M. K. Colver, J. Campbell, G. W. Clendenan, M. R. Elliott, H. P. Jackson, W. J. Kellow, E. Laws, W. H. Montague, W. G. McDonald, D. Rose, S. R. Rogers, W. A. Ross, J. W. Wilmot, J. B. Whitely, J. H. Radford, W. D. Fowler, J. M. Piper, C. Wilson, G. M. Milne.

Toronto Medical Society.—The following officers have been elected for the ensuing year:—Dr. Geo. Wright, President; Drs. A. H. Wright and Wilson, Vice-Presidents; Dr. McPhedran, Secretary; Dr. J. Robinson, Corresponding Secretary; and Dr. McDonald, Treasurer.

Correction.—In the list of those who passed the Council examination, printed in our last issue, the name of A. D. Thompson was given,. It should have been A. S. Thompson.

The death of Dr. Geo. Budd, F.R.S., formerly of King's College Hospital, London, at the age of 75 years, is announced in our British exchanges.

Appointments.—Dr. H. Watt has severed his connection with the Electro-Therapeutic Institution of this city, and has been appointed Medical Superintendent of the Royal Cariboo Hospital, Barkerville, B.C.

Dr. R. Douglass, of Port Elgin, Ont., has been appointed License Commissioner for the District of the North Riding of Bruce; and Dr. A. Rockwell, of Frankford, for the District of the West Riding of Hastings.

Coroners.—Dr. J. M. Smith, of Hyde Park, Ont., has been appointed Associate Coroner for the Co. of Middlesex.

Dr. H. D. Fraser, of Perth, has also been appointed Associate Coroner for the County of Lanark.

Books and Pamphlets.

Diseases of Women, including their Pathology Causation Symptoms, Diagnosis and Treatment. A Manual for Students and Practitioners. By Arthur W. Edis, M.D., Lond., F.R C.P., M.R.C.S. Assistant Obstetric Physician, Middlesex Hospital, with 148 Illustrations. Philadelphia : H. C. Lea's Sons. Toronto : Willing & Williamson.

In this work, which comprises about 500 pages, will be found one of the most complete digests of the pathology, diagnosis and treatment of diseases of women yet published. The author has drawn largely, and with due acknowledgements, upon such works as Barnes, Thomas, and other writers on Gynecology, to which he has added judiciously from his own experience, and has produced a work which is a credit to any author. We have profited much by a perusal of its contents, and have great pleasure in recommending it to our readers. The illustrations are very good, and sufficiently numerous to elucidate the text. If we were asked to compare the work with those of Barnes, Thomas, and Emmett, our answer would be similar to that once given us by the late Dr. Rolph, when asked which of certain standard authors on medicine was the best for a student, he replied "I don't know, they are all good."

The International Encyclopædia of Surgery. A systematic treatise on the Theory and Practice of Surgery, by authors of various nations. Illustrated with chromo-lithographs and wood-cuts. In 6 volumes. Vol. I. Edited by John Ashhurst, M.D., of Philadelphia. New York : William Wood & Co. Toronto : Willing & Williamson.

The object of this work is to furnish, in a comprehensive form, a systematic treatise upon all those subjects which properly pertain to the science and art of surgery, written by distinguished authors in various countries, who are believed to be specially qualified for the work. The First volume embraces such subjects as belong to General Surgery, including Inflammation. The Second volume will be devoted to Special Surgery ; the Third and Fourth volumes, to the surgery of the Tissues and Injuries and diseases of Special Regions ; and the Fifth and Sixth volumes, Regional surgery continued, and the History of Surgery, by Prof. Gross. An appendix will embrace papers on Hospital Construction, etc. The authors of the present volume are D. Hayes Agnew, Ashhurst, Brinton, Butlin, Delafield, Forbes, Hunt, Hunter, Johnston, Lyman, Mansell-Moullin, J. Lewis Smith, Stillé, Stricker, VanBuren, Verneuil, and Phillip S. Wales. With such an array of talent, it is wholly unnecessary to say anything in reference to the general excellence of the volume before us. The binding and general make-up of the book is all that can be desired.

Cancer of the Breast. With colored illustrations. By Thos. W. Nunn, F.R.C.S., Eng., Consulting Surgeon to the Middlesex Hospital. London : J. & A. Churchill. Toronto : Willing & Williamson.

The work before us is a quarto edition of about 200 pages, and illustrated by twenty-two colored plates. It is divided into two parts—the first clinical and practical, the second pathological and speculative. The author makes no attempt to classify cancers, but, on the contrary, considers it more rational to endeavour to discover resemblances and stages by which they merge one into another, and form a reverse sequence of retrograde changes. In this respect he differs from most pathologists, who regard the distinctions as sufficiently pronounced to warrant the division into scirrhus, encephaloid, and epethelial cancer. The work is upon the whole a most interesting and valuable addition to the literature of the subject. The colored plates are most beautifully executed, and are faithful representations of specimens which have come under the author's own observation.

Organic Materia Medica, by John M. Maisch, M.D. Philadelphia : Henry C. Lea's Son & Co., 1882.

This neat octavo, of 460 pages, is printed on excellent paper, and presents a large number of well executed plates To those readers who wish to find in compressed form, that instruction which they are obliged to search for in large, or unwieldy forms, Dr. Maisch's book cannot fail to be acceptable.

Births, Marriages and Deaths.

On the 15th ult., Alexander McKay, M. D., of Beaverton, Ont., aged 55 years.

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Original Communications.

ON THE HYPODERMIC INJECTION OF CYANIDE OF MERCURY IN SYPHILIS OF THE EYE.

BY DR. GALEZOWSKI.

(Translated from *Le Progrès Médical*, by W. GRAHAM, M.D., Brussels, Ont.).

Syphilis of the eye presents itself under the most varied forms, and with such grave characters, that the most energetic treatment at present known is often powerless to retard the progress of the disease and to prevent the loss of sight. Serious forms of syphilis are observed in every part of the eye. We have Iritis, Irido-cyclitis, Choroiditis with pigmentation in the retina, Optic Neuritis, and Syphilitic papillary Atrophy. Daily experience shows us that all these affections unfortunately resist the most energetic and most varied forms of treatment. It is evident that this want of success is due to the inefficiency of the means employed, to the incomplete absorption of mercury, and probably due to the difficult assimilation of the usual remedies by the fluids and tissues upon which we wish to act. All the medical world to-day is convinced that it is not without importance to prescribe mercury under the form of pills, of the proto-iodide or corrosive sublimate, or to apply it in the form of strong mercurial ointment.

That which concerns us we have shown more than fifteen years ago, in an article communicated to the Academy of Medicine in 1869, that syphilitic choroiditis is not cured by any mercurial preparation, administered through the digestive tract, but that it is cured on the contrary, by the aid of mercurial frictions made upon different parts of the body during two consecutive years. To-day, after fifteen years' experience, we desire to confirm that assertion, at the same time making this reservation, that in certain varieties of choroiditis this treatment is without efficacy. These mercurial frictions have not any action against syphilitic optic neuritis, no more than against papillary atrophy of the same nature.

In view of so many negative results, we have tried for over two years hypodermic injections of albuminate and peptonate of mercury, but it is our duty to declare that this method has not satisfied us, any more than its predecessors. In fact, these medicines although pushed to very large doses (200 or 300 grammes), have not been able to arrest either disease of the optic nerve or its consequent blindness. How ought we to view this want of success and what are the reasons which prevent the mercurial preparations from acting on the visual organs, when these same preparations check all other syphilitic symptoms, even the most grave? This has led us to an analysis of the question by studying some very interesting cases.

Three years ago we had under our care, with Prof. Fournier, a young man suffering from optic neuritis, with epileptiform symptoms of the most serious character. In the course of the disease, iritis and a syphilitic sarcocele showed themselves. Mercurial frictions and iodide of potassium arrested all the general symptoms, but the optic nerve became atrophied and the sight was completely lost. We have experienced similar failures in papillary atrophy. One could certainly explain this failure by the non-syphilitic cause of papillary atrophy, in admitting which this last affection may only come in a syphilitic by a coincidence. However, these two maladies are met with so frequently together, that it is difficult to see in all those cases only the simple result of chance. For our own part, we have known numbers of cases which show, without doubt, that atrophy is liable to develope itself under the direct influence of syphilis, without which the anti-syphilitic remedies employed would produce very little effect. Therefore since the most energetic treatment has been powerless to check the disease of the optic nerve, it is necessary to ask if the preparations employed in these cases have really a direct action upon the nerves of the eye, and to look for some mercurial preparation more efficacious and more easily absorbed.

The cyanide of mercury has appeared to present some great advantages, and the experiments we have made for over three months have completely

confirmed us in that opinion. This medicine is, as we shall see further on, one of the most powerful which exists to combat, not only the eye symptoms, but all the syphilitic affections of the eye having a cerebral origin. Before administering the cyanide hypodermically in man, we made with M. Despagnet, our clinical assistant, some experiments with animals, with the following results: In making injections of this solution in the dorsal region in rabbits weighing three to four pounds, we have seen paralysis of all the extremities produced, then general anæsthesia, diminution of heart beats, venous stasis in the optic papilla, and anæsthesia of the cornea. At the end of two hours all those symptoms had disappeared and the animal returned to its former state. With an animal younger and weighing only two pounds the same phenomena were produced, but they were followed by cessation of the heart's action and a fatal asphyxia. In forming a basis upon these experiments, we have been already able to draw this very important conclusion: that it is necessary to limit it in man to very small doses of 5 to 10 milligrammes for each injection. From daily experience we have, by the following, amply shown that in effect these doses have a very energetic action upon syphilis, and are very readily borne. In exceeding these doses, on the contrary, they provoke severe colic and diarrhœa. We have already made 234 injections amongst seven patients, and almost all of them have experienced excellent results. Iritis, with condyloma or with phlyctenular keratitis, has been cured after five, eight or ten injections, always in the dose of from 5 to 10 milligrammes. These injections do not leave any nodosity in the cellular tissue of the skin. We have the solution prepared according to Mialhe, in the proportion of 1 milligramme to a drop, making the dose easily calculated.

The four following observations prove the very great rapidity of action of cyanide of mercury in complicated iritis, which had resisted all former treatment, and which presented from the onset symptoms of exceptional gravity. These observations have been gathered by M. Despagnet, who had charge of making the injections.

Case I. *Right Iritis, with interstitial infiltration of the Cornea—Syphilis. Cured by injection of cyanide of mercury.* M. M., æt. 28, draughtsman; has had, 6 years ago, a blenorrhagia, with indurated chancre of the urethra, followed by all the secondary symptoms of syphilis.

Dec. 25, 1881. Orbital pains, photophobia, pericorneal injection. For eight days he had applied poultices and cold lotions.

Jan. 2, 1882. He came for consultation; congestion very intense throughout the globe; photophobia; violent pains in front and on the temples. Irregular pupil; cornea infiltrated, whitish in places, the vessels commencing to invade it in certain spots.

Treatment.—Instillation of atropine, and hypodermic injection of cyanide of mercury. The solution contained 1 milligramme of the cyanide per drop. I made the first injection of 5 drops, the the second 7, the third 10. After the sixth injection all trace of corneal infiltration had disappeared. There was scarcely any peri-keratic injection. The ciliary pain had completely gone after the third injection. I injected 15 milligrammes without the least accident. No salivation, no nodosity at the site of injection. After the tenth injection the iritis was completely cured. The visual acuity is normal. There remains upon the capsule a small round spot, formed by pigment.

Case II. *Left Iritis—Condyloma.* S., æt. 44, coachman; syphilis 11 years ago. Came on Jan. 19, 1882, for advice. He is ailing since Dec. 20. Left iritis very pronounced, with adherent pupil below and above. Condyloma upon the external and inferior papillary border.

Treatment.—Five leeches to the temple, instillation of atropine, hypodermic injection of the cyanide of mercury. At the beginning, I injected 1 centigramme of the mercurial salt, and I increased the dose to 2 centigrammes in four days. The fifth day the condyloma had disappeared. After the eighth injection there remained of the iritis only the inferior synechia.

Case III. Mme. D., æt. 46. Has an affection of the left eye for four years. Towards the end of November, 1881, the right became equally inflamed. She came to the clinic. We recognized in the right eye an iritis wirh phlyctenular keratitis, and an irido-choroiditis in the left, with papillary obstruction. We proposed for this eye an iridectomy, which was performed on the 23rd December. To the right we applied some leeches and the instillation of atropine. The patient is not rheumatic. She has been married twice, has not had any children. She denies all syphilitic antecedents. Under

the influence of antiphlogistic treatment the iritis seemed to get better, but on the 30th December suffered a relapse. This time the iritis was very much more pronounced. We dropped the atropine in the eye and ordered hypodermic injections of the cyanide. The first injection was 5 milligrammes, gradually increasing the dose to 15. The injections were very well borne, without salivation. No nodules of induration at the point of injection. They were all made in the dorsal region. The iritis was completely cured after the ninth injection, a small inferior synechia remaining. After the fifteenth injection, the patient recognized an improvement in the sight of the left eye. Before the injections, S=⅛; after the injections, S=¼.

Case IV. *Left Iritis, with phlyctenular Keratitis.* Mme. V., æt. 66. Came to the clinic on Dauphin-street, 24th Dec., 1881. For three days an intense inflammation has shown itself in the left eye, and at the same time accompanied by intolerable peri-orbital pains, increased especially at night to such an extent, that the patient has passed nine days consecutively without sleep. She confesses syphilitic antecedents; she is also rheumatic. When we saw her we recognized a well-marked iritis, with all the characteristics of a serious form. We prescribed leeches, atropine, salicylate of soda doses of 2 grammes a day at first and 4 grammes afterwards; no improvement. The condition of the patient became worse; want of appetite was added to insomnia. The eighth day the iris was cloudy and the cornea presented interstitial punctæ. After the complication we stopped the salicylate and prescribed the cyanide of mercury by injection. From the first day the patient was able to take rest, although she had not been able to sleep for a fortnight. After the second, the cephalalgia had completely ceased. The sixth day the iritis was completely cured. At the beginning we injected 5 milligrammes, at the end 1 centigramme of the mercurial salt. Six injections were sufficient to conquer the iritis. The keratitis has been more rebellious. Now she is completely cured. In an abridged form, we give some notes on other patients under treatment.

Case V. Mme. D., æt. 46; afflicted with double syphilitic irido-choroiditis. After twenty injections, acuity of vision increased one-third.

Case VI. M. B., æt. 22; attacked with an iritis with interstitial keratitis, and the most violent peri-orbital neuralgic pains. After a course of eighteen injections the pain ceased, but the keratitis pursued its regular course.

Case VII. Mme. A., æt. 32; attacked with a double iritis and condyloma. The mixed antiseptic treatment, pills of proto-iodide and mercurial frictions were unable to modify the disease. Cure was obtained after twelve injections of the Cyanide.

Case VIII. M. G., æt. 50; afflicted for eight months with a double syphilitic retinitis. He has submitted to the mercurial treatment by frictions for six months, without any improvement. Since the month of December last, M. Despagnet has made twenty-four injections of 5 to 10 milligrammes of the cyanide per day. The patient bore them well and is now much better. His acuity of vision has increased one-third. The peri-papillary infiltration has very notably diminished.

Case IX. Mme. X., æt. 57; has had syphilitic symptoms for two years, and since two months has been seized with a severe iritis, with some slight synechia and keratitis. The corrosive sublimate pills which she took at the commencement of her trouble, have not been productive of good. After fifteen injections of from 3 to 5 milligrammes of the cyanide, she is thoroughly cured.

ON ADENOMA OF THE VAULT OF THE PHARYNX.

BY G. S. RYERSON, M.D., L.R.C.P. AND S., EDIN.,

Lecturer on the Eye, Ear and Throat in Trinity Medical College, Toronto; Surgeon to the Mercer Eye and Ear Infirmary.*

Mr. President and Gentlemen,—I am induced to bring this subject to your notice on account of the prevalence of these growths, and because the symptoms are liable to be mistaken for nasal catarrh, and treatment directed to it would thus be unavailing. Also because of the danger incurred by the important functions of voice and hearing by its neglect. As patients suffering from this disease generally do not come to seek advice until the affection is fully established, the symptoms are usually well marked and voice and hearing not infrequently impaired.

The complaint is of frequent droppings into the

* Read before the Ontario Medical Association, June 7th, 1882.

throat and of great discharge in the morning. They say that they are obliged to spend half an hour in clearing the throat before they are able to speak; they often complain also of loss of appetite, heart-burn or acidity due to a catarrhal condition of the mucous membrane of the stomach from involuntarily swallowing decomposing mucus. Owing to obstruction to the posterior nares, the patients are obliged to breathe through the mouth during sleep, hence a dry, parched mouth on awakening; the throat often is red and sore for the same reason. The disturbance of digestion causes a bad taste (coppery) to be complained of. I remember one case where this was the chief ground of complaint and where every kind of digestive tonic had been taken in vain, and where relief was obtained by local treatment to the pharynx. There is a pretty constant feeling of having a cold in the head, a feeling of stuffiness, attended by discharge, which is not however through the nose, but into the mouth. This mucus is thick and stringy, of a yellowish-green color and frequently mixed with blood. Patients are often greatly alarmed on expectorating some pure blood, for these growths bleed easily and violent hawking may cause some hemorrhage.

As a consequence of the alteration in shape and diminution in size of the vault of the pharynx by these growths, the resonance and brilliancy of the voice becomes greatly impaired; the voice becomes what Meyer calls "dead" or flat. The nasal sounds are badly enunciated; tones such as "m" and "n" becoming "b" and "d". To the singing voice, such impairment is fatal. Difficult vocal movements, such as "staccato" or "pianissimo" are impossible. This disease further affects the larynx directly, by causing a pharyngo-laryngeal catarrh by continuity; also by the soft palate carrying the mucus to the tip of the uvula and thence dropping on to the arytenoids and into the larynx.

Another result of the obstruction to nose breathing is deformity of the nose, a drawing in of the alæ, a flattening of the bridge, a narrowing of the sides, or a generally stunted condition of the organ. It also gives to the face a stolid, expressionless look, which is quite characteristic. The chest suffers in some cases in young children; the sternum is projected forward, causing "pigeon breast." Respiration is noisy on exertion, and there is much snoring during sleep. There is also frequently a general arrest of development.

It not unfrequently happens that, on examining patients who present themselves on account of catarrhal deafness, with the rhinoscopic mirror, one finds these growths. They do not cause deafness, as some writers have asserted, by pressure on the Eustachian orifice, but by setting up more or less inflammatory action in the tube by contiguity. This extends to the middle ear, and thus hearing becomes impaired. It is impossible to conceive that such soft, friable bodies could exert pressure on the hard cartilaginous orifice of the tube.

This disease occurs in young adults and children; about equally divided between males and females. Meyer, of Copenhagen, met with 102 cases in eighteen months, after his attention was drawn to the matter; and on examining 2,000 school children, he found 20 with adenoma pharyngis. All of these had the "dead" pronunciation.

On local examination, one finds more or less chronic follicular pharyngitis, with ropy, yellowish-green pus descending from behind the palate. With the rhinoscopic mirror, a flattened or more or less pedunculed growth or growths of a pale reddish-grey color are to be seen; they vary in number from a single nodule to numerous lobules, which have been said to resemble a mass of earth-worms. To the finger they are soft and friable, though occasionally tough and elastic; they will often be found to fill up the posterior nares to a great extent. When large, even lifting the palate will reveal their presence. It is generally useful to use the finger as well, in examining this part; it gives the most reliable information as to consistency.

Causation.—A cold or variable climate may be justly accused of causing these growths; thus they are more frequently met with in Denmark than in southern Europe. The lymphatic temperament has great influence, especially in young children.

Heredity plays an important part in their production. Lowenberg, of Paris, gives an account of a family in which the mother and four children were affected with these tumors.

Pathology.—The great William Hunter was the first to point out the existence of glandular tissue in the vault of the pharynx. He made some beautiful preparations, which are now in the Hunterian museum in Glasgow. The best description, however, has been given by Luschka. Cohen says, quoting him, "It usually presents in the form of irregular longitudinal prominences, separated by shallower or deeper fissures and distinctly studded with minute whitish follicles, less in size than poppy seeds. A number of round pores are likewise observed, the orifices of venous glands, and in part also depressed follicles. At the lower portion of the middle of the mass there is a large oblong pore the size of a large pin-head, well defined superiorly, which is the orifice of a pouch-like appendix of the vault of the pharynx (bursa pharyngea). According to Lacauchie, as confirmed by Kölliker and Luschka, the adenoid tissue at the vault of the pharynx is a conglobate glandular mass, having the same structure as the tonsils; hence it has been called the pharyngeal tonsil. It is soft and spongy, and so closely incorporated with the cartilaginous tissue uniting the pharynx to the base of the cranium, that it is exceedingly difficult to separate them. The follicles are identical in structure with the solitary follicles of the intestine." The adenomata consists of a hypertrophy of this tissue, with more or less connective-tissue degeneration.

With regard to the *Prognosis*, Lowenberg says, "Unfortunately they do not heal spontaneously, and the sad results of this 'laisser-aller" treatment are not long in showing themselves in a dull aspect, ridiculous enunciation, etc." These tumors grow during early life and remain stationary during youth and adult life; but inasmuch as their presence gives rise to the serious train of symptoms before related, it is highly desirable that they should be removed. The results after extirpation are very satisfactory.

The differential *diagnosis* between these growths and polypus is important. Thus, polypus is found at all ages, whereas adenoma only in infancy and youth. Polypus causes discomfort in the nose, adenoma none. Polypus rarely causes deafness, adenoma generally does. Polypus appears at the anterior or posterior nares, whereas adenoma is strictly localized to the upper part of the pharynx.

Treatment.—To treat these tumors successfully, nothing but removal will avail. It has been proposed to use various caustic substances for this purpose, but their action is uncertain, and in the case of nitrate of silver, only tends to increase proliferation. The galvano-cautery is more satisfactory and has the advantage that there is little hemorrhage after its use. Jarvis' wire snare, such as modified by Bosworth, also acts well. But the instrument which I prefer is Cohen's cutting spoons. This instrument is introduced behind the velum, and the mass brought away in portions. There is usually some bleeding, but is never serious. In the case of children, it is generally better to give an anæsthetic. The after-treatment consists in painting the part with Acid tannic, gr. xx.; Glycerin, ℥iij.; Aq. ad., ℥j., twice a day. At the same time giving Syr. Hypophos. Co. (Fellows') and Syr. Ferri Iodidi internally.

Dr. Ryerson then showed the case of a young girl, æt. 9, with pedunculated growths in pharynx. She had the oral respiration, stunted nose and expressionless, "gawky" face in a marked degree. Also a young lady with marked deafness, with a large flattened growth.

In the discussion which followed, Dr. Osler, of Montreal, said that he had seen most striking improvement after the removal of these growths. He further stated that Dr. Buller was in the habit of removing them with his finger-nail, also with a curette (probably Mackenzie's).

Dr. Powell, of Edgar, wanted to know if the Eustachian tube was ever injured by the galvano-cautery or forceps.

Dr. Ryerson, in reply, said he thought the finger and curette were only applicable to small and pedunculated growths, and that he had never known the tube to be injured, but that it might be by a careless or inexperienced operator.

CASE OF SUPPRESSION OF URINE FOR THIRTY DAYS.

BY GEO. BRERETON, M.D., C.M., BETHANY, ONT.,
(Fellow of Trinity Medical School).

On the 13th of January, 1882, I was consulted with regard to M. S., an intelligent girl, æt. 11, fair

complexion, average in form; had scarlet fever at 18 months' old, followed by dropsy of short duration. Two years ago she was troubled with diminution of the urinary secretion, but under treatment recovered in a short time; with these exceptions she has, up to the present time, enjoyed good health. As I did not see the case at this date, the symptoms as related by her mother were, that she did not pass a sufficient quantity of urine and was pained on micturating; complained of a weakness over the hypogastric region, increasing to actual pain on lying down; quantity of urine voided not more than two tablespoonfuls daily; had been this way for a week, although she ate and drank as well as usual. Prescribed a diuretic mixture, ordered a warm bath morning and evening and gave a Dover's powder to prevent pain on lying down.

On the 18th, five days later, was summoned to see the case. Patient had no desire to micturate, except when bathed; no change in quantity voided, dull pain over kidneys and right side, pulse 100, temp. 100° F., tongue clean and very red; urine strongly alkaline, specific gravity normal, contained no trace of albumen; under the microscope, a few epithelial cells were noticed. Prescribed mineral acids with chalybeates, continued the bathing and applied friction to the skin and a stimulating embrocation over the kidneys and bowels. From this date up to the 27th the patient rapidly improved, but after the 27th, although the treatment was continued, she grew worse, and by the 4th of February was only voiding half an ounce of urine daily. During the period from the 4th of February to the 2nd of March, she only voided from one drachm to half an ounce, irregularly, every third or fourth day, and only evinced a desire to micturate when bathed; complained of no headache, eye-sight good, tongue clean but very red, appetite fair, better some days than others, average beat of the pulse 110, average temp. 101.5° F., respirations slightly accelerated, bowels regular, the excretions were not liquid, patient drank as freely as when in health, no symptoms of dropsy, slight swelling in the right groin, accompanied with slight pain at intervals. Towards the close of this period, slight dulness was detected over the right lung, on percussion and auscultation, skin keeps dry, rested fairly at nights. During this period the treatment consisted in diuretics, chalybeates, baths, friction to the surface of the body, with counter-irritation over the kidneys. Iodide of potassium was tried, but could not be borne by the patient.

From the 2nd of March to the 2nd of April, or a period of thirty days, not one single drop of urine was voided. During this time the dulness over the right lung increased; she expectorated small quantities of blood for two or three days at three different times; average beat of the pulse 115, average temp. 102° F., bowels continued regular, evacuations were not liquid, took as much fluid into the system as before, no symptoms of dropsy. Patient was closely watched and it was impossible for urine to be voided without knowing it; no muscular twitchings or uræmic symptoms noticed, rested fairly. Spirits good; always up during the day, playing through the house, but during the last fortnight of this period she was more disposed to lie and rest. Gradually failing in flesh and strength; skin harsh, dry and sallow; never perspired until permanent improvement took place. From the onset of the disease she never vomited; no calculi were at any time detected.

On the morning of the 2nd of April she passed a pint of normal-looking urine and has continued to urinate regularly since, and has improved both in appearance and strength. The treatment pursued during this period consisted in baths, chalybeates, potashes, hydroleine and dry cupping over the kidneys.

This case is instructive in one respect, and suggestive of a caution in judging of the probable termination, in a protracted case of suppression. So far, I have not discovered more than two well-authenticated cases of suppression, where the patient recovered, when the suppression continued longer than the eighth day. These cases are cited by Dr. Roberts, Physician to the Manchester Infirmary, in his work on Urinary diseases. Nor have I discovered more than two cases of complete suppression or approached completeness, where the patient survived beyond the eleventh day. One of these is recorded by Sir J. Paget. The patient was 73 years of age. The right kidney was atrophied and apparently incapable of secreting urine; the left was hypertrophied and the ureter blocked by a stone. With the exception of passing a considerable quantity of urine on the fourteenth day, total suppression ensued for twenty-one days, or up to the death of the patient. The second case is recorded by Dr. Rayer. The patient was a man 64

years of age. The ureter of the left kidney was blocked up by a calculus and suppression of urine ensued, which proved fatal in twenty-five days, and during that interval only two ounces of urine were voided by the patient.

[Dr. W. B. Geikie, of Toronto, reported in the CANADA LANCET for October, 1876, a case of "Gastric Ulcer, with entire Suppression of Urine for 30 days," ending in recovery].—Ed. LANCET.

Correspondence.

To the Editor of the CANADA LANCET.

SIR,—In the April number of the LANCET, in an editorial on the last report of the Registrar-General of Ontario, you conclude by referring to the many inaccuracies and the absurd phraseology in the report; and in the LANCET of June you were good enough to give me not a little credit for work done in connection with the preparation of the reports in the Department. I wish to state that I am in no way responsible for these inaccuracies nor for the ridiculous phraseology indulged in.

The general review of the vital statistics of Ontario, including the whole time since registration first came into force in the Province, which I made up and which is appended to the last annual report, was, after it first left my hands, in the proofs, so transposed and mangled, in the office of the Provincial Secretary, and doubtless for a purpose, that I took an opportunity and much trouble to go over it again and put it as nearly right as I could without having the whole text re-set, for it was in a most ridiculous and shameful state. It is still so much so—so inaccurate in some parts, that I wrote to the Registrar-General, Mr. Hardy, disclaiming all responsibility in regard to the errors in it.

The usual annual reports, in which I felt less interested, and only assisted Mr. Crewe in the compilation of, I did not go over or revise in the proof these last two years, and they went forth as you find them, the text transposed and generally mixed and mutilated (instead of "revised"); this was particularly the case with the last one, which you justly criticized in the LANCET of April.

Yours, etc.,

EDWARD PLAYTER.

May 20, 1882.

[The above was received too late for the June number].—Ed.

Reports of Societies.

ONTARIO MEDICAL ASSOCIATION.

The second annual meeting of the above named Association was held in Toronto on the 7th & 8th ult., Dr. Covernton, President, in the chair. A large attendance was present. The minutes of the last meeting were read by Dr. J. E. White, Secretary.

A communication was received from Dr. Powell, Ottawa, suggesting the advisability of establishing a "Mutual Benefit Association." The communication recommended a scale of graduated annual payments, with certain sums to be paid to the families of physicians in case of death. The communication was referred to the committee on papers and business.

A number of new members were then proposed and elected members of the Association.

The President then delivered an able and learned address. After dwelling upon the responsibility resting upon physicians in the exercise of their profession, and cautioning them against being too rash in putting into practice the sparkling novelties in theories that were brought forward, he gave a sketch of the work already done by the Provincial Board of Health. He dwelt upon the importance of Government enquiry into the health of cities, towns, and country, and the regulation of matters concerning the health of the people. He pointed out that equal necessity existed for the isolation of patients suffering from scarlet fever and diphtheria as of those suffering from small-pox, the more especially as there was no such protection as vaccination against the former diseases. No efforts to protect a community against the ravages of infectious diseases would be entirely successful until some public action was taken to instruct the people concerning the initial symptoms as well as the contagiousness of those forms of sickness, and concerning the measures which should at once be adopted for the protection of their own and other children.

It was also necessary that the sanitary authorities, in performing their duties for the isolation of the sick, and in the disinfection of affected houses, should act in a considerate spirit, or the public would withold their support. He proceeded to impress upon members of the profession the im-

portance of co-operating with the Provincial Board of Health in collecting vital statistics, of reporting to the public health officer every case of infectious disease coming under their notice, and of urging on their several municipalities the establishment of local boards of health and the appointment of local health officers. These local health officers by occasional lectures on the fundamental principles of hygiene could do much for the benefit of their respective communities.

The germ theory of zymotic and other diseases was adverted to, and the necessity of microscopic analysis in discovering the origin and progress of diseases was considered. He then referred to the discoveries made which clearly traced the origin of many of these diseases to the presence in the blood of *bacteria*, whose deadly influence could be lessened by certain preventive methods of treatment, or by inoculation for a mild type of disease. He stated that water was the most usual vehicle for conveying these germs into the human system, and pointed out how careful people should be in the selection of their drinking water.

He next referred to the discoveries of Koch with reference to the *bacilli* of tuberculosis, and the theory of the contagious nature of tubercular phthisis, which was gaining ground among members of the profession. In relation to the disposal of the bodies of persons dying from contagious diseases the lecturer spoke of cremation as destroying all possibility of infection from those bodies. What favour the system may meet with among medical men remains to be seen, but there was little doubt that the public generally would, at least at present, oppose any such method of disposing of the bodies of their relatives.

The President concluded an exhaustive address by warning those present of the great responsibility which rested upon them in regard to the preservation of the public health, and he adjured them not to shrink from the duty which an honourable profession entailed upon them.

Dr. Philip, of Brantford, read a paper on the "Antiseptic Treatment of *Phthisis*." This disease had been treated with marked success by the continuous inhalation of the vapour of carbolic acid or other antiseptic agents. The *British Medical Journal* was quoted as being in favour of such applications to internal suppurating surfaces, as their external use in similar cases had been attended with such decided benefit. The opinions of Virchow and other eminent German pathologists in relation to tubercles were entirely subversive of the commonly entertained opinions, both in reference to tubercles and tuberculosis pulmonalis. He gave the particulars of a case in which this treatment had been followed by very satisfactory results. He also exhibited Dr. McKenzie's naso-oral respirator and explained its use.

Dr. Worthington, of Clinton, read a paper on the beneficial result of "Cold Applications in Cases of Diphtheria." He reported a number of instances from his private practice, in which the use of cold applications had a most salutary and curative effect. The paper may be epitomized in the following deductions:—1. That diphtheria, like scarlatina, can be treated with less danger of a fatal result by the use of cold applications. 2. That full nourishment and tonics are necessary to counteract the prostrating effects of the disease. 3. That the inflammatory action in the larynx may be best controlled by cold externally to the throat and some atomized liquid inhaled by the patient. And lastly, that the temperature for the safety of the patient must be kept under 103° F. and that this can be best done by cold applications.

Dr. Stewart, of Brucefield, read a paper on a case of "Locomotor Ataxia," in which the sciatic nerve had been stretched, and beneficial results had followed, so far at least as the most painful symptoms were concerned. He exhibited the patient to the Association.

Dr. Avery, delegate from the Michigan State Board of Health was invited to a seat on the platform, as was also Dr. Fenwick of Montreal, President of the Dominion Medical Association. These gentlemen made a few remarks. Drs. Osler, Gardner and Shepherd, of Montreal were elected members of the Association by invitation.

Dr. Curry, Rockwood, read a paper on the "Science of Medicine."

Dr. Temple, of Toronto, read an interesting paper on "Lacerations of the Cervix Uteri, as treated by trachelorraphy." He gave the results of six cases, where the operation had been performed either by himself or with his assistance.

Dr. Powell, of Edgar, read a paper on the "Occurrence of Hemorrhage after Tonsillotomy."

Dr. Dupuis, of Kingston, read an able paper on "Dislocation of the Elbow-joint."

Dr. Smith, of Sparta, read a paper on "Alcohol in Disease." He deprecated its use in all cases, and claimed that its effects were invariably deleterious. In cases where stimulants might be considered necessary other agents such as ether, etc., might be used to accomplish the desired end.

Dr. McDonald made some remarks on the use of alcohol in disease, and also the treatment of epilepsy by bromide of zinc and other drugs.

The President, Dr. Covernton, found drop doses of Fowler's solution given with bromide of potassium, prevent the acne which sometimes follows the use of the latter medicine.

Dr. Oldright then read a paper on "Measurements in Surgical Practice."

Dr. Ryerson also read an interesting paper on "Adenoma of the Vault of the Pharynx."

Dr. Playter read an interesting paper on "Some Points in the Vital Statistics of Ontario."

The President said the Ontario Government could not at present give a sufficiently large grant until the public properly appreciated the importance of the question.

Dr. Canniff thought the Dominion Government should give a grant towards the collection of vital statistics, and it had in fact taken a step in this direction.

Dr. Pyne spoke on the question of insufficient remuneration awarded to medical men, and the public lack of recognition of their great services.

The President then extended a general invitation from Dr. O'Rielly to visit the Hospital the following day, after which an adjournment was made until ten o'clock to-morrow.

SECOND DAY.

The Association met at 10.30 a.m., the President in the chair. Dr. Palmer, of Toronto, read an interesting paper on the "Lighting of Public Schools," in which he showed that the sight of pupils might be permanently injured through the defective system of lighting.

Dr. McDonnell, of Brechin, read an excellent paper on "Muriate of Calcium as a Resolvent."

Dr. Holmes, Chatham, read a paper on "Trachelorraphy," with more especial reference to Dr. Emmett's treatment of the laceration of the cervix by stitching. Dr. Rosebrugh and others considered the cases of such lacerations more frequent than was generally supposed, as they were often mistaken for other complaints. Drs. Mullen, Hamilton; Curry, Rockwood; Clemesha, Port Hope, and others opposed the opinion that those lacerations were of frequent occurrence.

Dr. Ghent, of Priceville, read a paper on the "Specific Treatment of Diphtheria," recommending an application to the diphtheritic patch, by means of a silver tube of biborate of soda and sulphur, in proportion of about one to twelve parts, the applications being made every two or four hours, according to the severity of the disease. He also fumigated the room three times a day with sulphurous acid.

Dr. Stalker, of Harwich, questioned the value of the remedy recommended by Dr. Ghent.

Dr. McDonald, Hamilton, found favorable results follow the use of hot fomentations. Drs. Powell, White and others joined in the discussion. Dr. McKelcan also read a paper upon the same disease. He advocated the use of pot. permanganate two or three grains to the ounce of lime water, and given in tea-spoonful doses.

Dr. Riddel read an exhaustive paper on the "Duties of Coroners," referring to many points of interest relating to medical jurisprudence.

The Committee on Nominations reported, recommending the following elections for the year. The report was adopted.

President—Dr. Macdonald, Hamilton. 1st Vice-President, Dr. Stewart, Brucefield. 2nd Vice-President—Dr. D. Clark, Toronto. 3rd Vice-President—Dr. Dupuis, Kingston. 4th Vice-President—Dr. Harrison, Selkirk. General Secretary—Dr. White, Toronto. Treasurer—Dr. J. E. Graham, Toronto. Corresponding Secretaries—Drs. Wm. Graham, Brussels; Burt, Paris; Coburn, Oshawa; McIntosh, Vankleek Hill.

Committee on Credentials—Dr. Beeman, Centreville; Drs. Burns and Pyne, Toronto.

Committee on Public Health—Drs. Playter, Allison, Oldright, and Youmans.

Committee on Legislation—Drs. Spohn, Sloan, G. Wright, Covernton, Mullin and Macfarlane.

Committee on Publication—Drs. Cameron, Burns, and Fulton, with the Secretary and Treasurer.

Committee on By-laws—Drs. A. H. Wright, More, Tanner, Cotton, and Bowlby.

Committee on Medical Ethics—Drs. Ghent, O'Rielly, Carney, C. K. Clarke, and Sinclair.

Committee on Nominations—Drs. Burns, Fulton, Rosebrugh, Yeomans, Hamilton, Stewart.

Dr. Fulton presented the Report of the Committee on Publication, which stated that the Committee had decided to hand over the papers unconditionally to the Toronto medical journals for publication in their columns from time to time during the year ; also that 500 copies of the Constitution and By-laws were printed and distributed to the members of the Association.

Dr. Fulton also presented the Report of the Committee on Medicine, Materia Medica and Physiology. The report contained an epitomized account of the progress in medicine during the year, and new remedies introduced and the result of their use.

Dr. Geikie read the report of the delegates to the International Medical Congress in London. The descriptions both of the proceedings at the meeting and the scenes and incidents of the metropolis were extremely interesting and graphic.

Dr. Rosebrugh read the report on Ophthalmology and Otology.

Dr. Riddell read the Report of the Committee on Necrology, which was adopted, as were all the preceding.

After some discussion, on the motion of Dr. Bray, seconded by Dr. Knight, it was decided that Toronto be the next place of meeting of the Association.

The Treasurer's and Secretary's Reports were read and adopted.

Dr. Strange suggested the propriety of publishing the proceedings of the Association in book form, a copy to be given to each member of the Association.

Dr. White, the Secretary, coincided with the views of the last speaker, and stated that the cost of publication would not amount to more than $150. After some discussion it was decided that the Committee on Publication be instructed to hand the papers over unconditionally to the medical journals for publication from time to time, and such papers as were not published to be returned to the authors on request.

A resolution was passed approving of the action of the Provincial Board of Health of Ontario in co-operating with the National, State and Local Boards of Health in the United States and in the Dominion of Canada in the attempt to prevent the introduction and spread of smallpox by the inspection and vaccination of emigrants, and the disinfection of their baggage and clothing, and by notification to all boards interested of the entry or proposed entry within their jurisdiction of emigrants suspected of carrying with them the germs of any disease dangerous to the public health.

Dr. Canniff moved "That in the opinion of this Association the formation of a medical library and museum would prove beneficial to the profession of this province, and that the following committee be appointed to consider the feasibility of such a scheme :—Drs. Cameron, Holmes, Fulton, Reed, Davison, Powell, and the mover." Carried.

Dr. D. Clark moved, "That the Secretary, Dr. White, receive a gratuity of $100 for his valuable services during the past year." Carried.

The President-elect, Dr. McDonald, was then installed and made an appropriate speech, thanking the Association for the honour conferred upon him, and prophesying a brilliant future for the organization.

The thanks of the Association were conveyed to Dr. Covernton, the past President, for the able manner in which he had discharged his duties. A vote of thanks was also awarded to the Medical Council for the use of their hall by the Association, and to the various railways and steamboat lines for courtesies and favours extended to members of the Association. The Association then adjourned to meet again on the first Wednesday in June, 1883.

There was quite a display of surgical instruments and a varied assortment of medicines in the hall, the following being the principal :—Dr. Thomas, representing Hazen Morse, Front-street East, had on exhibition sample bottles of Malto-pepsyn and Hydroleine, which were furnished free to doctors, that they might test their value as remedial agents- Maltine and its combinations, manufactured by Reed & Carrick, New York, and Lactopeptine, manufactnred by the New York Pharmacal Association, were exhibited by H. P. Gisborne, Canadian representative of the houses referred too. J. Steven's & Son, of Wellington-street, East, exhibited surgical iustruments, etc. Potter's Electric Battery and the Student's Union Co-operative Association exhibits also were attractive features. Mr. E. B. Shuttleworth also exhibited samples of new remedies, pharmaceutical preparations and fluid extracts.

ONTARIO MEDICAL COUNCIL.

The regular annual meeting of the Medical Council of the College of Physicians and Surgeons of Ontario met at Toronto on the 13th ult. In the absence of the President, Dr. Bergin, the Registrar, Dr. Pyne presided. The minutes of the last meeting were read and confirmed.

Dr. Rosebrugh, of Hamilton, elected as the representative of Victoria College in place of the late Senator Brouse, presented his credentials and took his seat in the Council.

The election of officers was then proceeded with, with the following result :—President, Dr. Bray, Chatham ; Vice-President, Dr. Geikie, Toronto ; Registrar, Dr. R. A. Pyne ; Treasurer, Dr. W. T. Aikins ; Solicitor, D'Alton McCarthy, Q.C.

The President referred to the death of Senator Brouse, and on motion of Dr. Geikie, a committee was appointed to draft a suitable resolution in regard thereto.

On motion of Dr. Lavell, the following committee was appointed to strike the Standing Committees for the year :—Drs. Day, Geikie, Logan, Spragge, Edwards and Cranston.

After a brief consultation they reported as follows :—

Committee on Registration—Drs. Bergin, Rosebrugh, J. W. Wright, Vernon, Buchan, Grant.

Rules and Regulations—Drs. Rosebrugh, Husband, J. W. Wright, Spragge, and Grant.

Finance—Drs. Edwards, Allison, McCargow, Day, Henderson, and Douglas.

Printing—Drs. McCammon, Vernon, Burritt, Morden, and Day.

Education—Drs. Lavell, Geikie, McCammon, H. H. Wright, McDonald, Burritt, Logan, Morden, Williams, Burns, Cranston, and Spragge.

A number of petitions were received and referred to the various committees, some of them being from students who had failed to pass the examination in particular subjects. One was from the Mayor and other residents of Amherstburg, asking that a license or permit be granted to Dr. Daniel Pearson, who had been practising for thirty years, and who had previously practiced in the United States for ten years. Dr. Shepherd, of Port Elgin, also applied for registration, as having been a number of years in practice, and having a license from the Quebec Medical Board. A female practitioner, Mrs. Weston, of Preston, also applied for a license.

A number of cases of prosecution for practicing medicine without a license have taken place during the last year, although no special detective was employed by the Council. Dr. Bray, the President, reported several cases in his district, nearly all of whom had been convicted.

The Registrar read the report of the Board of Examiners.

The meeting then adjourned until ten o'clock tomorrow.

June 14th, 1882.

The Council met at 10 o'clock a.m., the President in the chair.

Dr. Day gave notice of a motion "to define what should be considered residence at elections."

Dr. Lavell gave notice of a by-law providing that the assessment to be levied on each practitioner be $1, and that the registrar be instructed to send out circulars giving notice of this assessment.

A letter was read from the solicitor of Mr. William Smith, formerly employed as a detective by the Council, stating his claim, and offering to refer it to arbitration.

The Registrar stated the agreement was that Mr. Smith should receive $1,200 a year, on his producing certificates from magistrates that he had procured convictions to that amount. Certificates had been presented to the amount of $675, and $600 had been paid to Smith. Subsequently he had procured convictions to the amount of $100. The Registrar, however, had discovered that in one case he had acted improperly, which he was advised invalidated the whole claim.

On motion of Dr. H. H. Wright a committee was appointed to investigate the matter.

Dr. Geikie presented the report of the committee appointed to draft a resolution with reference to the death of the late Senator Brouse, and moved its adoption. The following is the resolution :—

"That this Council learned with the sincerest regret the death of their late colleague, the Hon. Senator Brouse, and place on record the very high regard in which he has always been held by his associates. In the death of this gentleman the Council has lost an able associate and the profession of medicine one of its most distinguished members. We hereby tender to his bereaved

family our heartiest sympathy in their bereavement."

Dr. Lavell, in seconding the resolution, spoke feelingly of the loss which the profession and the Council had sustained.

The President mentioned the work which Dr. Brouse had done in the cause of sanitary science, and Dr. H. H. Wright gave a brief account of his career.

The resolution was carried by a standing vote, and was ordered to be engrossed and a copy sent to Dr. Brouse's family.

Dr. Wright presented the report of the Committee appointed to inquire into the claim of Wm. Smith, recommending that it be referred to the solicitor of the Council for further advice.

Dr. Macdonald moved that the Registrar be instructed to prepare a new register. The present one, he remarked, was now seven years old. After some discussion as to what the register should contain, the motion was carried, and Drs. H. H. Wright, Burns, and Geikie were appointed a Committee to assist the Registrar in the work.

The Treasurer, Dr. W. T. Aitkins, presented his annual report, which showed a balance in hand at last meeting of $2,011.14; assessments, $793.63; registration fees, $1,384.75; fines, $386.14; fees from candidates at professional examinations, $2.540; total, $7,015.66. The balance now in bank to the credit of the Council, after deducting all expenditures for the last fiscal year, is $1.568.31. The Executive Committee which formerly entailed an annual expense of about $500, had not met during the year, and the services of the detective, employed at a salary of $1,200 per year, had been dispensed with, notwithstanding which the amount received from fines was in excess of that received last year. An increase in the assessment to provide for the increasing indebtedness of the college was recommended. The Report was referred to the Committee on Finance.

Dr. Day gave notice of motion, that the Treasurer's statement be printed and sent to every registered practitioner in Ontario.

The Council then adjourned.

June 15th, 1882.

The Council met at 10.30 a.m., and after routine went into Committee of the Whole on the report of the Committee appointed to wait upon the Local Legislature for the purpose of procuring an Act to amend the Ontario Medical Act. The report stated that in consequence of a resolution now standing on the minutes of the proceedings of this Council, and which they believe to have been there by mistake they have been unable to proceed. At the last annual meeting of the Council it was decided to apply to the Local Legislature to have the Ontario Medical Act so amended as to re-adjust the representation of the profession and of the colleges at the Council. At the same meeting an amendment, directing the Committee to get the opinion of the Superior Court Judges upon the Act, was discussed, and, according to the minutes, carried. This resolution annulled the previous motion.

Dr. Day, who presented the report of the Committee, said he was certain that the resolution referred to did not carry.

Dr. Macdonald strongly opposed the report, and the advisability of going before the Legislature for any amendment.

Dr. Burns thought the Council should look at their duty to their constituents, and in this view there were unmistakeable signs of dissatisfaction among the profession on the question of representation.

Dr. Bray supported the report, contending that the present was the time for the profession to make itself felt.

Dr. Williams thought that the Council should be unanimous upon the nature of the changes they wanted.

Dr. Lavell pointed out that the present scheme of representation was the result of a compromise between the colleges and the different branches of the profession. He referred to the difficulty which would arise in classifying the colleges so as to show which should be entitled to representation. He suggested that any committee which might be appointed should report to the Council before taking any action.

Dr. Burritt thought that the Council should not be frightened out of going before the Legislature.

Dr. Geikie thought the Committee should go over the Act clause by clause, and see what amendments are required. The report was adopted.

The report of the Registration Committee, dealing with a number of applications for registration,

was received and adopted. The prayers of the petitioners were not granted.

In reference to the claim of William Smith, a letter was received from the solicitors advising the Council to ask for particulars.

Dr. Allison, seconded by Dr. Burns, moved a resolution having for its object the disposal of the present building in which the Council meets, as it was considered entirely unsuited for its present purposes. It was generally agreed that the building was not a suitable one for a college, and that it could be sold at a considerably higher price than the Council paid for it. A committee, consisting of the city members and Drs. Allison and Macdonald, was appointed with power to sell if they thought advisable, and also to enquire about a site for a new building. The Council then adjourned until 10 a.m. to-morrow.

June 16th, 1882.

The Council met at ten a.m. After routine, Dr. Edwards presented the report of the Finance Committee, which was adopted. The report showed that the arrears of fees due the Council were $4,954, which are supposed to be collectable. The value of the building is from $18,000 to $20,000, and there is a mortgage of $6,000 upon it. The expenses of the present session amount to $1,985.

Dr. Macdonald brought before the Council a plan, proposed by Dr. Playter, for collecting disease statistics. It proposed that the Federal Government appoint for the Dominion 144 medical practitioners, to report every week upon the diseases most prevalent, their severity, etc., in their respective districts. Of these, 65 would be allotted to Ontario—one in each county town—and 28 others distributed in other towns and villages in the province. The observers were to be paid the sum of $25 for filling in the 52 reports of the year. Dr. Macdonald moved and Dr. Burritt seconded a motion approving of the plan, which was carried.

Dr. Lavell presented the report of the Education Committee. Most of the petitions considered by the committee were refused, the principal exception being in the case of Mr. W. F. Peters, who failed by a very few marks in surgical anatomy last year, and had a large margin on other subjects, and who is now living at Michipicoton Island, which is so far from Toronto as to make it impracticable for him to attend the examination.

Several changes were made in the regulations governing the examination of students, the most important of which were a clause allowing candidates who had paid for a professional examination and failed to pass it, to go up for one subsequent examination without further fee; and an instruction to examiners to confine their questions to the text-books in common use, and in referring to diseases, surgical operations, etc., to use the names most commonly in use.

The following board of examiners was appointed:—Anatomy (descriptive), Dr. Fulton, Toronto; Medicine and Pathology, Dr. A. S. Oliver, Kingston; Midwifery, Dr. Burdett, Belleville; Physiology, Dr. Tye, Chatham; Surgery and Surgical Anatomy, Dr. Canniff, Toronto; Chemistry and Toxicology, Dr. Barrett, Toronto; Materia Medica and Botany, Dr. W. W. Dickson, Pembroke; Medical Jurisprudence and Sanitary Science, Dr. Nichol, Brantford Homœopathic examiner, Dr. G. E. Field, Woodstock.

The following were appointed as an Executive Committee:—The President, Vice-President of Council, and Dr. Henderson.

On motion of Dr. Lavell the Registrar was authorized to issue the annual announcement.

The Council then adjourned.

ONTARIO BOARD OF HEALTH.

The Provincial Board of Health met in Toronto on the 6th ult. Present:—Dr. W. Oldright, chairman, and Drs. C. W Covernton, J. J. Cassidy, J. Rae, Oshawa, and Dr. P. H. Bryce, secretary. The visitors were Dr. John Avery, delegate from the Michigan State Board of Health, and Dr. J. E. White, Secretary of the Ontario Medical Association. The Minutes of the last meeting were read and adopted with slight change. A number of communications were read. One was from Dr. Moorhouse, calling attention to the nuisance caused by gardeners in this city who use, as a fertilizer, liquid night soil. A disease-report scheme was discussed, the object of the scheme being to obtain, if possible, weekly reports from doctors in different parts of Ontario containing first, a list of the cases attended by them, and the diseases treated, and second, the severity of the disease, and third, its prevalence. It was also agreed that a weekly compilation of the reports be made by the

Secretary of the Board, and that he communicate with medical men for the purpose of securing their co-operation in the scheme. The Secretary reported that he had received a quantity of fresh vaccine matter from the National Vaccine Establishment at Washington, to be supplied to provincial medical men at cost price. A diagram was exhibited, showing the effect that ozone—active oxygen—had upon certain diseases, both as to their frequency and severity. It was shown that an excess of ozone in the air decreased the frequency of cases of diarrhœa, while the maximum of cases of pneumonia, diphtheria, and other throat and lung diseases were shown to occur under such atmospheric conditions as showed an excess of ozone. This is entirely different from the opinion generally entertained in reference to diphtheria, which was supposed to be benefited by the presence of active oxygen in the air. The subject of the inspection of emigrants in order to guard against the introduction of smallpox and other contagious diseases was discussed, but was deferred till the next meeting.

It was moved by Dr. Covernton, seconded by Dr. Cassidy, "That it is desirable that a systematic system of sanitary supervision and inspection of public schools be established all over the Province of Ontario, and that efficiently to carry it out a local health officer should be appointed, whose duty should consist in preventing children who have been suffering from infectious diseases from attending school before the infectious period has passed; in visiting the houses of children absent from school in consequence of illness; and in making strict inquiries into the general sanitary condition of the respective families, and to see that through competent persons contagion should be sought out and destroyed in the house in which it originated." Carried.

It was moved by Dr. Cassidy, seconded by Dr. Covernton, "That this Board would express the opinion that the appointment of health officers by municipal councils should be confined to local medical men, who, from their professional training, are alone qualied to perform the work efficiently." Carried.

Selected Articles.

NEPHROTOMY AND NEPHRECTOMY.

BY J. KNOWSLEY THORNTON, M.B., C.M.
Surgeon to the Samaritan Hospital.

The pathological conditions of the kidney which may call for the interference of the surgeon are—calculus in the kidney or ureter; suppuration in the pelvis of the kidney, depending on the presence of calculus, and the obstruction it causes to the escape of the urine (calculus pyelitis); suppuration depending on scrofulous or tubercular disease (pyonephrosis); hydronephrosis, which may arise from several different causes, or be congenital, as I believe was the case in my first successful nephrectomy, performed on a child aged seven (*The Lancet*, June 5, 1880); loose or floating kidney; certain rare forms of cystic disease; and the more solid neoplasms. The surgical procedures which have been or are now employed for the relief of these conditions are—aspiration or tapping, which is of course only palliative; nephrotomy, that is, incision into the kidney; and nephrectomy, or the complete removal of the organ. . . .

Lumbar section is much in favor with some surgeons; and as it is the most suitable operation for the class of cases first named in my list of pathological conditions, we will take it first. I have performed this operation three times, and all the patients have recovered. The first was a case of tubercular suppuration, and the patient derived immense relief from the operation; but a permanent fistula remained, and the other kidney becoming also affected, she eventually died of suppression of urine. The second was a case of one of the rarer forms of cystic disease in connection with the kidney. The cyst was opened and drained antiseptically, and the patient is now in good health. The third is the case of M.D., the young woman on whom I afterwards performed nephrectomy, and who has just gone home quite well. Those of you who were present at the nephrotomy in this case will remember that I made an incision in the right lumbar region, commencing at the centre of the last rib, and carried down somewhat obliquely to about the centre of the crest of the ilium, the outer border of the quadratus lumborum being thus exposed and forming a guide to the deeper parts of the incision. You will also remember how very free the hemorrhage was from a number of small vessels, and how it interfered with a good view of the deeper parts of the wound until it was restrained by pressure forceps. The patient was thin, but still the kidney was reached at some depth, and of course this would be enormously inrcreased in a very stout person. I wish,

then, to direct your attention to the facts that the kidney is readily reached in this situation, but there is small hemorrhage, which may be of moment in a very weak patient; and that the space for examination of the kidney is not very large. The organ is reached at the farthest point from the vessels, and it is impossible to explore the whole course of the ureter.

The question in my case was, Is the suppuration due to calculus or tubercle? The answer was not given by the exploration I was able to make through the loin incision; there might have been a stone in the incision beyond my reach. There were no tubercular growths as in my first case. Had I made my exploration through the abdomen by an operation to be immediately discussed, I should have been able, before cutting into the kidney, to satisfy myself as to whether the obstruction was in the ureter, and in this particular case should have recognized the enormously and irregularly enlarged and hardened ureter as an indication of tubercle, and should have at once proceeded to remove the kidney. As it was, I could not feel certain as to the cause of the suppuration, and so determined to try the effect of free antiseptic drainage. The result was a partial improvement followed by relapse, and a month later I had to perform nephrectomy complicated by the presence of a putrid sinus in the loin. The hectic and exhausted condition of this patient before operation, gives a very fair sample of what one will usually have to face in performing nephrotomy or nephrectomy for suppurating kidney.

In thus calling your attention to the disadvantages of the lumbar incision, I must remind you that in my second case it would have been absolutely impossible to complete the operation through that incision. Some operators have found it necessary to resect a portion of the last rib—a proceeding which must be admitted to add enormously to the risk of nephrectomy. One surgeon has suggested that the rib could be sufficiently pushed or drawn aside; but with either of these aids it would have been absolutely impossible to remove the enormous mass (four pounds seven ounces), especially in such a very stout patient. The only cases in the future in which I would use the lumbar incision, are those in which there is little or no enlargement of the kidney. In short, I would restrict its use to the operation of nephro-lithotomy. The experience of Beck, Butlin, Morris, Haward, and others abundantly proves that there is a great future for this operation, and that when the kidney substance which is cut through in reaching the stone is fairly healthy, there is nothing to fear from the immediate hemorrhage, and but small risk of permanent urinary fistula. The abdominal methods would be quite unsuitable for this procedure, but experience alone can decide which method will be best when there is strong evidence of calculus pyelitis. My own impression is that whenever the kidney is much distended it will be found that urinary fistula is likely to remain after the removal of the stone through the loin, and that it will become the rule to perform nephrectomy rather than nephro-lithotomy. In any case in which I had commenced with the loin incision, and then decided that it was better to perform nephrectomy, I should certainly complete the operation by that abdominal section which you have seen me use, and which I am now going to describe more in detail, merely using the previous loin wound for drainage, and of course suturing the greater portion of it.

We will now consider nephrectomy by abdominal section. There are two incisions, both of which I have tried. The one is made in the median line, to the left of the umbilicus, and extends for about an equal distance above and below it. By this incision the general peritoneal cavity is fully exposed, and the kidney is most conveniently approached through the inner layer of the meso-colon. It can, of course, be approached through the outer layer, but as the operation proceeds the colon will be constantly in the way of the surgeon; whereas, if through the inner layer, it will, as enucleation proceeds, shrink into its natural position and give no more trouble. When enucleating the right kidney, however, through the inner layer, one is exposed to much greater risk of hemorrhage, as pointed out by Langenbeck at the International Congress, because the vessels to the transverse colon pass chiefly through this inner layer. It might appear that the median incision would give one a more direct approach to the renal vessels; but this is not the case, or at least it is more than counterbalanced by the annoyance caused by the omentum and small intestines. The chief objection to the median incision is, however, the great exposure of the general cavity of the peritoneum and its contents.

The incision advocated by Langenbeck is made outside the rectus abdominis, and it is the one you have seen me use in both these successful cases. Admitting the advantage claimed by Langenbeck, when the right kidney is in question, I go much farther and claim for it such advantages over both the lumbar and median incisions that I believe it will, at no distant date, be *the incision* for nephrectomy, as completely as the median incision is *the incision* for ovariotomy and like operations. The following are its advantages: An almost bloodless incision through the abdominal parieties and peritoneum; a complete command of both kidney and ureter for thorough examination and diagnosis; a comparatively bloodless and safe operation, should complete nephrectomy be decided upon. The fact that the peritoneal cavity is opened is of little moment, for there is no general exposure of its contents, and with the most ordinary care no possibility of any blood or foreign matter passing

among the intestines; it is, in short, quite possible to make it practically an extra-peritoneal operation by having the inner edge of the parietal peritoneum and the inner edge of the incision through the meso-colon held together or temporarily secured by a few sutures. The renal vessels can be reached and secured with ease by merely pushing the finger through the cellular tissue between the peritoneum and the kidney, and this can be done before the kidney is enucleated, and the most important part of the operation is thus performed with comparatively trifling hemorrhage. Of course the amount of difficulty in both reaching the vessels and enucleating the kidney, will vary much according to the amount of adhesion between the peritoneum and capsule, and the kidney and the capsule respectively; but whether this be great or small, I am certain that it is both safer and easier to perform the enucleation with plenty of space, and distinctly seeing all one does, than through a deep and obscure opening like the loin incision. If there is much adhesion the peritoneum is sure to be torn and opened in many places, and there is much less risk when this is done openly and with proper sponging and with the possibility of effectually closing the openings made. Of course, all I say of these operations is said with the full understanding that they are to be performed with the strictest antiseptic precautions, and my recent experience shows that even with putrid pus in the kidney, and with a putrid loin sinus, the operation can still be made aseptic by the free use of tincture of iodine, and with great care in the final steps of enucleation of the kidney.

I have now to mention a proceeding which I believe I have been the first to introduce, and which I consider to be of the greatest consequence to the safety of the patient and the aseptic performance of the operation. I refer to the fixing of the bladder-end of the ureter outside the abdominal incision, so that the septic material it is certain to contain is not left deep in the recesses of the wound. I tie it as firmly as possible with strong silk and cut it off so as to leave only just enough stump to pass a pin through and keep it from slipping into the wound. I clean this stump well with iodine and pack it round with a little cotton squeezed out of tincture of iodine. By this method I have been able, in both cases you have seen, to avoid putrefaction in the early stages of the case; that is, until the peritoneum is well sealed. I think that the question of drainage in each of these operations must be decided at the time for each individual case. Whenever there is a loin opening, as in my first case, I should certainly use it, passing an india-rubber tube right through from the abdominal incision (as I did in that case), so that the wound could be at once flushed and washed out if any septic symptom appeared. In any case in which I felt sure of asepsis, I should not drain, as I am sure the peritoneal surfaces about the wound would rapidly remove (absorb) fluid effused, as was the case in my little girl, and in the last case you have seen.

To sum up, then, I would recommend that the lumbar incision be only used for cases in which there is a strong suspicion that a calculus is present, and that the operation will end in nephrolithotomy; and I should be disposed, in any case in which I had commenced by the lumbar incision, and then found it necessary to complete the nephrectomy, to do so by Langenbeck's incision, utilizing a portion of the already made lumbar incision for drainage, and closing the remainder. I would in all other cases, such as neoplasm of kidney, hydronephrosis, pyonephrosis, and floating kidney, operate by abdominal section, making the incision along the outer border of the rectus abdominis instead of in the median line.—*Medical Times and Gazette.*

MARTIN'S BANDAGE IN THE TREATMENT OF FRACTURE OF THE PATELLA.

Dr. Byrd, of Quincy, Ill., gives in the *Med. and Surg. Reporter*, the following history of a case:—

January 9th, 1882, I was called to see Henry Meyer, an athletic labourer, aged 28 years, who was said to have received a sprain of the knee. When I saw him, I found that, while out hunting, his foot had slipped, and in his endeavor to regain his equilibrium, the right patella was fractured at the junction of the middle and lower third. The fragments were separated sufficiently to admit the thumb being placed between them. There was considerable effusion into the joint, with great pain. Not being able to get a leather or shellac-cloth splint at the time, I took an inch-thick pine board, that would extend from the sub-gluteal fold to below the heel, and so shaped it that it was about as wide as the greatest diameter of the leg, except just opposite the joint, where I made projections, so that the bandage, passing around the limb and splint, would exert traction upon the fragments in such a manner as to draw them together (see the cut in Dr. Hamilton's "Fractures and Dislocations," sixth edition, p. 523) and not slip. The splint was well padded, so as to fit the limb comfortably, and the bandage was applied as on page quoted above; "a roller, made of unglazed cotton cloth, is then turned around the leg and splint to within about three inches of the knee, and another from the upper end of the splint, over the splint and thigh, to within three inches of the knee. While an assistant approximates the fragments with his fingers, the surgeon makes two or three turns with a third roller around the limb

and splint, close above the knee ; after which the roller descends below the knee, and an equal number of circular turns are made close below the lower fragment of the patella ; and finally, a succession of oblique and circular turns are made above and below the fragments, which turns are to approach each other in front until the whole of the patella is covered, the last turns being again circular. The dressing now being completed, the rollers are carefully stitched to the cover of the splint, through its whole length, on both sides, and the limb is left supported in the elevated position by a suspending apparatus, or by some other mode which will insure its maintenance." I quote the above for the reader to understand that all Dr. Hamilton's details were carried out, with the exception of the substitution of a pine board for a splint, instead of shellac cloth. This treatment was kept up for a week, but the effusion and swelling not diminishing, I applied a Martin's rubber bandage, instead of the cotton one, from the ankle to the gluteal fold, expecting to get absorption of the effused fluid, and also by the constant elastic pressure to overcome any tendency to spasms in the quadriceps muscle. I had intended to remove the fluid from within the joint, with the aspirator, before applying the bandage, but having removed the bandage from another patient just before calling to see this one, and not having the aspirator with me, I concluded to apply the bandage, as I had it with me, and if necessary aspirate the next day. When I came to see him the next day the swelling had subsided so much, and he was feeling so comfortable, that I decided not to aspirate. From this time on he made a speedy recovery. At the end of nine weeks I let him go upon his crutches, and to-day he walks well on the limb, although there is yet considerable stiffness of the joint. The union is so intimate that it is with the greatest difficulty that the site of the fracture can be made out.

I do not know but that the board splint could be replaced, with advantage to the patient, by one of shellac or plaster-of-paris, allowing the patient to go upon his crutches at once, applied to the posterior half of the leg, as suggested by Dr. Hamilton. The shellac, on account of its weight, would, of course, be the best. In using the india-rubber bandage it should be taken off at least once a day, and the limb washed, to clean off accumulated epithelial scales and perspiration ; the bandage should then be washed dry and re-applied. There can be but little doubt that a great deal if not the whole of the displacement of the fragments is owing to the effusion within the joint, and it would be a good and safe practice to aspire before applying the bandage ; for my views in regard to aspiration of joints I refer the reader to the Baltimore *Independent Practitioner* for Sept., 1880, or to a very valuable paper by Dr. Wm. Judkins, of Cincinnati, O., published in the N. Y. *Med. Record*, April 8, 1882.

PROFESSOR BILLROTH AND PIROGOFF'S ILLNESS.

Much difference of opinion and discussion has occurred in medical circles over the illness of the recently deceased famous Russian surgeon, Pirogoff. The discussion has arisen from the difference in opinion of Prof. Billroth and the attendant Russian surgeons. Prof. Billroth has recently written a letter to Dr. Wywodzow, in St. Petersburg, who had sent a portion of the tumor, from which Pirogoff suffered, to Vienna. I make a few abstracts from his letter

" More than two-thirds of the sections taken from the tumor consist of a small-celled, vessel-rich, fibro-sarcomatous tissue ; upon one periphery of the section, there are, however, very distinct epithelial structures, and in one corner is a bit of exquisite epithelial-carcinoma with epithelial pearls; the latter are apparently somewhat horny and possess a peculiar bright-brownish color ; whether this color was originally so, or perhaps has arisen from the employment of Peru balsam which I recommended to Pirogoff, I am not able to decide.

" From this discovery, it appears that my views of the case, as well as those of my Russian col leagues, were correct. When Pirogoff consulted me in Vienna, I had the impression that the disease had originally acted as a chronic inflammatory process in the alveolus of the last upper left molar tooth ; this tooth became loose and fell out. Then the chronic inflammatory, new formation grew forth, and took on gradually the character of an infiltrated sarcomatous epulis, as I have more frequently noticed in old people. In this stage, I saw Pirogoff. The regular tumor was free from epithelium ; the surface appeared to be granulating well, were tolerably firm, and bore no traces of destruction. The epithelium was not entirely destroyed in these places, but grew here and there, as it followed several islands of cicatricial tissue. In consequence, this epithelial growth had taken on a more proliferating and destructive character ; in this manner it resulted in the partial development of a genuine epithelial carcinoma. I should like to place the progress of carcinoma formation in parallelism with lupus and other chronic ulcers. The swollen lymphatic glands, which, as I hear, appeared later behind the angle of the lower jaw, were certainly the carcinoma of infection.

" However interesting and instructive the result of microscopic investigations in such cases may be, and however the etiology of the progress of the tumor may be anatomically illustrated, yet the diagnosis of carcinoma in the present case determined me not to operate.

" A man seventy years old, although still of most buoyant spirit, yet bearing in himself all signs of bodily marasmus, with cataract in both eyes, etc., had no prospect of surviving such an operation as

one would have been obliged to make, only to remain for a short time free from a recurrence of the disease. Yes, I declare to you, that if such a patient was both vigorous and twenty years younger than Pirogoff was, I would not operate upon him. My experience as a surgeon, now of thirty years' duration, has taught me that sarcomata and carcinomata, beginning entirely behind the upper jaw, are never capable of radical removal by operative procedure, even if one operates with some probability of his patient surviving the operation. Behind the upper jaw an operator is so hindred, partly technically, partly anatomically, that a clean extirpation is impossible, although he may be dealing with a very exceptional case of entirely encapsuled tumor.

"*I am no longer the unterrified, bold operator as you knew me in Zürich. I lay before myself now, always, the question, Would you permit this operation to be performed upon yourself if you were in the patient's position? Then, one comes, in the course of years, to a certain resignation. With every year which fate yet gives me, shall I become more and more affected by bad results in our art.*

"I should have blamed the surgeon who would have attempted an operation upon Pirogoff. So far as I myself was concerned, I knew I could accomplish no favorable result in his case; so I attempted, through encouragement, to lift up the psychical depression of the patient, and talk him over to patience, in order to deceive him as to the significance of his suffering. That is, indeed, all we are able to do in such cases. It is really perfectly natural that my views conflicted with those of my distinguished Russian colleagues, yet I have acted as, according to my experience, I held it my duty.

"If you wish to publish this letter I have no objections. I have withdrawn for ever from the literary stage at the command of surgery, and confine myself, in word and deed, to my students and patients, so long as it may yet be permitted me to work. With friendliest greetings,

"Your most obedient servant,

"DR. H. BILLROTH."

—(*Med. News Correspondent*).

MYOPIA IN FRANCE.—It is stated in the report of the committee, which was appointed some time ago by the French Government to inquire into the prevalence of short-sightedness amongst the youths at the great Government schools in France, that the cause of the infirmity is to be found in the fact that the school books are printed in type which is too finely cut, and further, that the custom of printing upon white paper is still more hurtful. They recommend, therefore, that the authorities should consider the advisability of substituting thicker characters in the books, and also printing in white letters upon tinted paper.—*Brit. Med. Journal.*

RIP VAN WINKLE, M.D.

[As *apropos* of some of the characters occasionally to be met with at Medical Association meetings, we republish the following humorous poem, written by Oliver Wendell Holmes, M.D., LL.D., and recited by him as an after-dinner prescription, at the Massachusetts Medical Society, several years ago.]—Ed. LANCET.

CANTO FIRST.

Old Rip Van Winkle had a grandson, Rip,
Of the paternal block a genuine chip;
A lazy, sleepy, curious kind of chap;
He, like his grandsire, took a mighty nap,
Whereof the story I propose to tell
In two brief cantos, if you listen well.

The times were hard when Rip to manhood grew;
They always will be when there's work to do;
He tried at farming—found it rather slow—
And then at teaching—what he didn't know;
Then took to hanging round the tavern bars,
To frequent toddies and long-nine cigars;
Till Dame Van Winkle, out of patience, vexed
With preaching homilies, having for their text
A mop, a broomstick—aught that might avail
To point a moral or adorn a tale,
Exclaimed—"I have it! Now then Mr. V.!
He's good for somethiug—make him an M. D."!

The die was cast; the youngster was content;
They packed his shirts and stockings, and he went.
How hard he studied it were vain to tell—
He drowsed through Wistar, nodded every Bell,
Slept sound with Cooper, snored aloud on Good;
Heard heaps of lectures—doubtless understood—
A constant listner, for he did not fail
To carve his name on every bench and rail.
Months grew to years; at last he counted three;
And Rip Van Winkle found himself M. D.
Illustrious title! in a guilded frame
He set the sheepskin with his Latin name!
RIPUM VAN WINKLUM, QUEM we—SCIMUS—know
IDONEUM ESSE—to do so and so;
He hired an office; soon its walls displayed
His new diploma and his stock in trade,
A mighty arsenal to subdue disease
Of various names, whereof I mention these:
Lancets and bougies, great and little squirt,
Rhubarb and Senna, Snakeroot, Thoroughwort,
Ant. Tart., Vin., Colch., Pil. Colocynth. and Black Drop,
Tinctures of Opium, Gentian, Henbane, Hop,
Pulv. Ipecacuanhæ, which for lack
Of breath to utter, men call Ipecac,
Camphor and Kino, Turpentine, Tolu,
Cubebs, "Copeevy," Vitriol—white and blue,
Fennel and Flaxseed, Slippery Elm and Squill,
And roots of Sassafras and "Sarsap'rill,"
Brandy—for colics—Pinkroot, death on worms—
Valerian, calmer of hysterical squirms,
Musk, Assafœtida, the resinous gum
Named from its odor—well, it does smell some—
Jalap, that works not wisely, but too well,
Ten pounds of bark and six of Calomel.

For outward griefs he had an ample store,
Some twenty jars and gallipots, or more;
Ceratum simplex—housewives oft compile
The same at home, and call it "wax and ile;"
Unguentum Resinosum—change its name,
The "drawing salve" of many an ancient dame:
Argenti Nitras, also Spanish flies,
Whose virtue makes the water-bladders rise—
(Some say that spread upon a toper's skin
They draw no water, only rum or gin)—

Leeches, sweet vermin ! don't they charm the sick ?
And Sticking-plaster—how it hates to stick !
Emplastrum Ferri—ditto *Picis*, Pitch ;
Washes and Powders, Brimstone for the—which,
Scabies or *Psora*, is thy chosen name
Since Hahnemann's goosequill scratch'd thee into fame,
Proved thee the source of every nameless ill,
Whose sole specific is a moonshine pill,
Till saucy science, with a quiet grin,
Held up the Acarus, crawling on a pin ?
—Mountains have labored and have brought forth mice :
The Dutchman's theory hatched a brood of—twice
I've well nigh said them—words unfitting quite
For these fair precincts and for ears polite.
The surest foot may chance at last to slip,
And so at length it proved with Dr. Rip.
One full sized bottle stood upon the shelf
Which held the medicine he took himself ;
Whate'er the reason, it must be confessed
He filled that bottle oftener than the rest ;
What drug it held I don't presume to know—
The gilded label said " Elixir Pro."

One day the Doctor found the bottle full,
And, being thirsty, took a vigorous pull,
Put back the " Elixir" where 'twas always found,
And had old Dobbin saddled and brought round.
—You know these old-time rhubarb-colored nags
That carried Doctors and their saddle-bags ;
Sagacious beasts ! they stopped at every place
Where blinds were shut—knew every patient's case—
Looked up and thought—the baby's in a fit—
That won't last long—he'll soon be through with it ;
But shook their heads before the knockered door
Where some old lady told the story o'er
Whose endless stream of tribulation flows
For gastric griefs and peristaltic woes.

What jack o'lantern led him from his way,
And where it led him, it were hard to say ;
Enough that wandering many a weary mile
Through paths the mountain sheep trod single file,
O'ercome by feelings such as patients know
Who dose too freely with " Elixir Pro,"
He tumbl'd—dismounted, slightly in a heap,
And lay, promiscuous, lapped in balmy sleep.

Night followed night, and day succeeded day,
But snoring still the slumbering Doctor lay.
Poor Dobbin, starving, thought upon his stall,
And straggled homeward, saddle-bags and all ;
The village people hunted all around,
But Rip was missing—never could be found.
" Drownded," they guessed ;—for more than half a year
The pouts and eels *did* taste uncommon queer ;
Some said of apple-brandy—other some
Found a strong flavor of New England rum.

—Why can't a fellow hear the fine things said
About a fellow when a fellow's dead ?
The best of doctors –so the press declared—
A public blessing while his life was spared,
True to his country, bounteous to the poor,
In all things temperate, sober, just and pure ;
The best of husbands ! echoed Mrs. Van,
And set her cap to catch another man.

—So ends this Canto—if it's *quantum suff.*,
We'll just stop here and say we've had enough,
And leave poor Rip to sleep for thirty years ;
I'll grind the organ—if you'll lend your ears
To hear my second Canto after that
We'll send around the monkey with the hat.

Canto Second.

So thirty years had past—but not a word
In all that time of Rip was ever heard ;
The world wagged on—it never does go back—
The widow Van was now the widow Mac—
France was an Empire—Andrew J. was dead,
And Abraham L. was reigning in his stead,
Four murderous years had passed in savage strife,
Yet still the rebel held his bloody knife.
At last one morning—who forgets the day
When the black cloud of war dissolved away ;
The joyous tidings spread o'er land and sea,
Rebellion done for ! Grant has captured Lee !
Up every flagstaff sprang the Stars and Stripes—
Out rushed the Extras wild with mammoth types—
Down went the laborer's hod, the schoolboy's book—
,' Hooraw !" he cried—" the rebel army's took !"
Ah ! what a time ! the folks all mad with joy :
Each fond, pale mother thinking of her boy ;
Old gray-haired fathers meeting—Have you heard ?
And then a choke—and not another word ;
Sisters all smiling—maidens, not less dear,
In trembling poise between a smile and tear ;
Poor Bridget thinking how she'll stuff the plums
In that big cake for Johnny when he comes ;
Cripples afoot—rheumatics on the jump,
Old girls so loving they could hug the pump,
Guns going bang ! from every fort and ship—
They banged so loud at last they wakened Rip.

I spare the picture, how a man appears
Who's been asleep a score or two of years ;
You all have seen it to perfection done
By Joe Van Wink—I mean Rip Jefferson.
Well, so it was—old Rip at last came back,
Claimed his old wife—the present widow Mac—
Had his old sign regilded, and began
To practice physic on the same old plan.

Some weeks went by—it was not long to wait—
And " please to call" grew frequent on the slate.
He had, in fact, an ancient mildewed air,
A long grey beard, a plenteous lack of hair—
The musty look that always recommends
Your good old Doctor to his ailing friends.
—Talk of your science ! after all is said
There's nothing like a bald and shiny head –
Age lends the graces that are sure to please,
Folks wont their Doctors mouldy, like their cheese.

So Rip began to look at people's tongues
And thump their briskets (called it " sound their lungs"),
Brushed up his knowledge smartly as he could,
Read in old Cullen and in Doctor Good.
The town was healthy ; for a month or two
He gave the sexton very little work to do.

About the time dogday heats begin,
Measles and mumps and mulligrubs sets in ;
With autumn evenings dysentery came,
And dusky typhoid lit his smouldering flame ;
The blacksmith ailed—the carpenter was down,
And half the children sickened in the town.
The sexton's face grew shorter than before—
The sexton's wife a brand new bonnet wore—
Things looked qnite serious—Death had got a grip
On old and young, in spite of Dr. Rip.

And now the Squire was taken with a chill—
Wife gave " hot drops"—at night an Indian pill ;
Next morning, feverish—bedtime, getting worse,
Out of his head—began to rave and curse ;
The Doctor sent for—double quick he came :
Ant. Tart. gran. duo, and repeat the same

If no *et cætera*. Third day—nothing new ;
Percussed his thorax—set him cussing, too—
Lung-fever threatening—something of the sort—
Out with the lancet—let him bleed—a quart—
Ten leeches next—then blister to his side ;
Ten grains of calomel——just then he died.

The Deacon next required the Doctor's care—
Took cold by sitting in a draft of air—
Pains in the back, but what the matter is
Not quite so clear—wife calls it "rheumatiz."
Rubs back with flannel—gives him something hot—
"Ah!" says the Deacon, "that goes *nigh* the spot."
Next day a *rigor*—run, my little man,
And say the Deacon sends for Dr. Van.
The Doctor came—percussion as before,
Thumping and banging till his ribs were sore—
"Right side the flattest"—then more vigorous raps—
Fever—that's certain—pleurisy, perhaps.
A quart of blood will ease the pain, no doubt,
Ten leeches next will help to suck it out,
Then clap a blister on the painful part--
But first two grains of *Antimonium Tart.*
Last, with a dose of cleansing calomel
Unload the portal system——that sounds well !

But when the self-same remedies were tried,
As all the village knew, the Squire had died ;
The neighbors hinted—"this will never do,
He's killed the Squire—he'll kill the Deacon too."

—Now when a doctor's patients are perplexed,
A *consultation* comes in order next—
You know what that is? In a certain place
Meet certain doctors to discuss a case
And other matters, such as weather, crops,
Potatoes, pumpkins, lager beer and hops.
For what's the use?—there's little to be said,
Nine times in ten your man's as good as dead—
At best a talk (the secret to disclose)
Where three men guess and *sometimes* one man knows.

The counsel summoned came without delay—
Young Doctor Green and shrewd old Doctor Gray—
They heard the story—"Bleed!" says Doctor Green,
"That's downright murder! cut his throat, you mean!
Leeches! the reptiles! Why, for pity's sake,
Not try an adder or a rattlesnake?
Blisters! Why bless you, they're against the law—
It's rank assault and battery if they draw!
Tartrate of Antimony! shade of Luke,
Stomachs turn pale at thought of such rebuke!
The portal system! What's the man about?
Unload your nonsense! Calomel's played out!
You've been asleep—you'd better sleep away
Till some one calls you"——
"Stop!" says Doctor Gray—
"The story is you slept for thirty years ;
With brother Green, I own that it appears,
You must have slumbered most amazing sound ;
But sleep once more till thirty years come round,
You'll find the lancet in its honored place,
Leeches and blisters rescued from disgrace,
Your drugs redeemed from fashion's passing scorn,
And counted safe to give to babes unborn."

Poor sleepy Rip, M.M.S.S., M.D.,
A puzzled, serious, saddened man was he ;
Home from the Deacon's house he plodded slow,
And filled one bumper of "Elixir Pro."
"Good bye," he faltered, Mrs. Van, my dear!
I'm going to sleep, but wake me once a year ;
I don't like bleaching in the frost and dew,
I'll take the barn, if all the same to you.
Just once a year—remember, no mistake!
Cry 'Rip Van Winkle! time for you to wake!
Watch for the week in May when lilacs blow,
For then the Doctors meet, and I must go."

—Just once a year the Doctor's worthy dame
Goes to the barn and shouts her husband's name.
"Come, Rip Van Winkle!" (giving him a shake)
Lilacs in blossom! 'tis the month of May—
The Doctors' meeting is this blessed day,
And come what will, you know I heard you swear
You'd never miss it, but be always there!'"

And so it is, as every year comes round
Old Rip Van Winkle here is always found.
You'll quickly know him by his mildewed air
The hayseed sprinkled through his scanty hair,
The lichens growing on his rusty suit—
I've seen a toadstool sprouting on his boot—
—Who says I lie? Does any man presume—
Toadstool? No matter—call it a mushroom.
Where is his seat? He moves it every year ;
But look, you'll find him—he is always here—
Perhaps you'll track him by a whiff you know—
A certain flavor of "Elixir Pro."

Now, then, I give you—as you seem to think
We can drink healths without a drop to drink—
Health to the mighty sleeper—long live he!
Our brother Rip, M.M.S.S., M.D.!

COMPLETE PROCIDENTIA OF THE GRAVID UTERUS.

Dr. Shimoner (*Med. and Surg. Reporter*) reports the following case :—

A lady, about thirty-four years of age, primipara, enjoyed fair health before pregnancy ; was married two years ago. I first saw her on the 27th of September last, on account of inability to micturate, complaining of much pain in the abdomen, and unable to keep the erect posture. Upon examination I discovered an enlargement of the abdomen. Proceeding to draw off her urine, I, to my great surprise, felt a large tumor between her thighs, which, upon closer inspection, proved to be the pregnant uterus prolapsed. It protruded about six inches, was about two inches across the os, and about five inches at the fundus. With little difficulty I replaced it, in about ten minutes, after which she got up and passed considerable water, without any difficulty, and felt well till the uterus again prolapsed. From that time up to her labor I replaced the womb five times ; at one time it prolapsed down to the knees, carrying down the vagina and bladder. I tried to keep her in bed, but she would get up, in spite of all I would say ; would do her housework, running up and down a flight of stairs.

[Dr. Ross, of this city, reported a similar case in a recent number of the *Canadian Journal Medical Science.*]

MALIGNANT DISEASE VERSUS SYPHILIS.—Dr. Patterson, of Glasgow, (*British Medical Journal*), writes as follows regarding Malignant Diseases vs. Syphilis :—Every surgeon, I am sure, reads with pleasure and profit anything from the pen of Mr. Jonathan Hutchinson. In the *Journal* of March 4th he refers to the clinical differences in character of malignant disease, according to its seat. Referring to certain cases of cancer of the skin of the trunk, it is stated that "In all, the ulceration progressed slowly during many years, caused but little pain, and produced no gland disease." Further on: "The disease of which I speak is most intractable, and, as far as I have observed, recurs immediately after removal." Reference is next made to an interesting case, in which Mr. Hutchinson twice removed the ulcer by the knife, and three or four times by caustic, but without benefit. "As soon as the sore was nearly healed, it recurred."

May a provincial surgeon be permitted to give a case in many respects parallel? Some years ago, a man aged 45, suffering from epithelial cancer of the scrotum, sent for an eminent surgeon, for the purpose of having it removed. The operation was well performed. No one who saw the case had the slightest misgiving regarding its nature, but, as a formal matter, the diseased structure was handed to a practised microscopist in the neighbourhood, who stated that it was epithelioma, without doubt. When nearly healed, it recurred, and was removed again, only to begin to spread when almost completely well. A third time it was taken away, with a like result. At the fourth operation, the testicle, which now appeared to be implicated superficially, was removed. When cicatrisation was all but perfect, the surgeon left town for his holidays, and shortly afterwards the patients medical attendant requested me to perform the fifth operation, as the disease was spreading again. Having the history of the case before me, in a hopeless, half-hearted sort of way I cleared away the diseased tissues as carefully and completely as possible with the knife, and watched the healing process with much interest. Matters progressed very favourably until the healing line was reached, when once more the ulceration began. Such conduct in a chimney-sweeper's cancer appeared to me unique. I saw that operating again was useless, and I stood pondering at the bedside, my eyes rested on the shining bald head of the patient. As a random shot, the question was put as to when his hair first came out. He said his hair began to fall soon after he joined the service, more than twenty years ago. The answer gave the clue. Iodide of potassium was prescribed, when the wound rapidly and perfectly healed, and has so remained.

Last year a lady, aged 60, came to consult me regarding an ulcer on the left side of her nose. She had been recommended by her medical attendant, whose card she brought, to see me regarding removal by operation. The sore, she said, began about two years ago, as a mall scab or flattened wart, and continued to increase in size slowly and without pain since that time. The ulcer was now about five-eighths of an inch in length by half an inch in breadth, throwing out little discharge, and surrounded by an elevated, clear, glistening border. As she was accompanied by a friend, few questions were asked, and I simply stated that it might be prudent to defer operative interference in the meantime. The patient was given a prescription for tertiary syphilis, requested to use the medicine for six weeks, and then return. She did so, and the sore was completely healed. This was apparently a small rodent ulcer, with a syphilitic origin. We are, probably, yet far from thoroughly understanding the multifarious ramifications of syphilis.

QUININE IN THE TREATMENT OF CHOLERA INFANTUM.—The mortality reports among infants and young children are, in most parts of the country, greatly swelled during the summer months; and the greatest factor in producing this increase is what is commonly known as cholera infantum. Most parts of the country are particularly subject to it, while few localities enjoy an absolute immunity from it. With these facts so well known to the profession at large, comes the surprising statement of Dr. Otis F. Manson, of Richmond, Va., (Transactions of the Medical Society of Virginia, 1881): that he has not lost a case of cholera infantum since 1846. While attending a case of the disease at that time in a six months old child, he conceived the idea that it was caused by malaria; and venturing to give quinine, was gratified to obtain almost immediate relief in an apparently hopeless case. Since that time he has rescued large numbers of children suffering from this rapidly fatal disease, by the same means. He considers it a variety of malarial fever, and unhesitatingly says that the general adoption of his method will greatly diminish its mortality. Being called to a patient early, he administers from one-third to one-half a grain of calomel, with a few grains of sugar, on the tongue every half hour or hour, until the presence of bile in the alvine evacuations is evident. Gastric irritability, cold extremities, and heat about the head are to be met respectively by sinapisms, warm pediluvia, and cold applications. For delirium, coma, and convulsions the careful use of the cold douche is advised. Cold water, powdered ice, cool lime-water and milk, etc., are given to allay thirst; and small enemata of laudanum are resorted to, to control excessive vomiting and purging. Along with all this comes the main feature of the treatment, the administration of quinine, which is to be postponed until late at night unless the case is urgent. If called to a case

in the evening he waits until midnight and then gives to a child six months old and under, one grain of quinine every three or four hours until the pulse and temperature begin to fall. For a child one year old two grains are to be given. After the fever has subsided, the quinine, for the day, is to be suspended to commence again at midnight. Opium may be mixed with the minute doses of calomel, which should be continued until bile is clearly evident in the stools.

In the same volume of "Transactions" the same author, in his exhaustive paper on "The Physiological and Therapeutic Action of the Sulphate of Quinine," says:—"In cholera infantum I have witnessed the most beneficial effects from the employment of the sulphate of quinine. I was first led to use it in this fatal malady from observing the unequal distribution of animal heat to be discerned in the majority of cases, the strong tendency to congestion of the brain in the worst grades of the affection, and its simultaneous appearance and disappearance with malarial fever, etc. Given in sedative doses, I have not only seen these symptoms promptly removed, but also have generally observed the vomiting and purging to cease. I have seen it rescue cases in the last stages of the malady, when the extremities were cold and the patient in profound coma. Did the limits of this paper admit, I could relate almost miraculous recoveries from the use of the remedy in this disease, in apparently hopeless conditions. In cholera infantum I usually prescribe it in doses of one to three grains (carefully watching its effects lest sedative action might transcend the desirable degree) and repeating the doses every two or three hours, according to circumstances. In the chronic diarrhœa following attacks of cholera infantum, I usually employ it in small doses in combination with tannin and subnitrate of bismuth."—*Obstetric Gazette.*

THE PHYSIOLOGICAL ACTION OF BLOOD-LETTING.—The unquestionable effect of local depletion in relieving some forms of inflammation appears to have been confirmed and explained by the recent researches of Dr. Genzmer, of Halle (*Centr. f. d. Med. Wiss.*, April 1, 1882). This observer has found that when inflammation has been set up in the web of the frog's foot in the usual way—say by means of a hot wire or by caustics—and the process is watched under the microscope, it is possible to remove the stasis, to empty the blocked vessels, and so far to relieve the inflammation by applying a leech to the limb of the animal between the lesion and the heart. The actual phenomena attending the resolution of the inflammatory process prove, however, to be the very opposite of what might have been expected. Instead of producing anæmia of the affected area, leeching leads to hyperæmia of the part by drawing the blood from the blocked vessels, and allowing a full and rapid stream to flow once more through them. Thus the leucocytes, clinging to the walls previous to diapedesis, are swept away in the blood-current; and one of the elements of inflammation is rapidly removed. But the abstraction of blood causes more than simple resolution. It is manifest that the free influx of blood into the inflamed area—that is, the hyperæmia—must restore the nutrition of the part, the reduction of which constitutes another of the factors of inflammation. Whether or not the leucocytes which may have already escaped from the circulation into the tissues pass back into the vessels, Dr. Genzmer is unable to say. Results similar in kind, but less marked in degree, followed scarification, instead of leeching, between the inflammatory focus and the heart. Distant venesection produced a decidedly less distinct influence. The results of these observations are decidedly valuable, but their importance must not be exaggerated. In the first place, as Dr. Genzmer remarks, they account for the effect of leeching *above* the seat of inflammation, not *at* or *over* it; secondly, they cannot be said to apply to venesection in visceral inflammations; and, thirdly, they do not explain the action of leeching or of venesection in the cases where these measures are clinically practised with most success—for example, in cardiac distress or in uræmia. It is possible that the antiphlogistic action of a poultice in inflammation may be the same as the local effect of leeching which has just been described, namely, the reduction of stasis, and the promotion of a free flow of blood through the damaged tissues.—*Med. Times and Gazette*, May 13, 1882.

A NEW VESICANT.—Dr. José Armengue, of Barcelona, has lately brought to the notice of the profession a new vesicant, which in many respects would appear to be far superior to cantharides. The new material is derived from the *Œnas afer*, a coleopterous insect, which at certain seasons of the year appears in enormous quantities in many parts of Spain. From experiments which Professor Armengue has instituted on his own person, and on that of several medical students, he is led to claim for the *Œnas afer* as a vesicant the following advantages over cantharides: it is cheaper; it acts without appreciable pain; it is equally powerful; and it does not, so far as his experiments have yet shown, affect the genito-urinary system. If its non-inflammatory action can be established by further experiment, it is probable that the *Œnas afer* will be a valuable addition to the materia medica.—*Brit. Med. Journal.*

LEMONADE IRON.—The following perscription is recommended by Wm. Godell:

℞. Tincturæ Ferri Chloridi, . . ʒiv.
Acidi Phosphorici diluti, . . ʒvj.
Spiritus Limonis, ... ʒij.
Syrupum, ... ad ʒvi.—M.
Sig. A dessertspoonful, in water, after meals.

NEW METHOD OF CURING HYDROCELE.(–Escher. in *Centralblatt für Chirurgie*).—This new method of treatment consists in the introduction of a bougie into the sac after the latter has been punctured and evacuated in the usual manner. In the case of children or young persons the bougie (1-10th inch in diameter) is introduced to a depth of four or six inches, and remains in the sac from one to 12 hours. In adults the bougie may be passed in to a depth of 12 inches, and be retained 24 or even 30 hours. When reaction has thus been ensured, the bougie is removed, and the inflammation treated by rest, compresses, etc., according to the degree of its severity. This new method has been tried in 250 cases. It is said never to have yet failed to cure, and that recurrence is rare.–*Edin. Med. Jl.*

BORACIC ACID IN OTORRHŒA.—Dr. Charles D. Turnbull (*Medical and Surgical Reporter*, May 13, 1882,) claims that boracic acid, well powdered and "bolted," filled into the meatus, previously carefully cleaned through the speculum, and packed layer upon layer by gradually withdrawing the speculum till it reaches the mouth of the meatus, is almost a specific for otorrhœa, as he has cured every case of the hundreds he has treated and kept records of for the past three years. If the discharge ceases and leaves a hardened mass of discharge and powder filling the meatus, it must not be removed by force or syringing, but must be softened by instillation of warm fluid cosmoline. As the mass softens it may be delicately picked loose or blown out of the meatus by the rubber bag of a Politzer's air douche.—*Med. Review.*

An Irishwoman, needing some silk and some tape, sent her husband for them. The silk was shown, but the buyer thought the price too great. The clerk explained that all silk goods were dear, owing to some disease at this time prevailing among the silk-worms. The tape was next examined, and Mr. Irishman thought that a little stiff, too, as to price. "And, indade, sir," says he, "is there likewoise a dezase prevalin' among the tape-worms?"

ROGERS ON ETHNOLOGY.—The poet Rogers, often related, post-prandially, the following anecdote: "An Englishman and a Frenchman fought a duel in a darkened room. The Englishman, unwilling to take the life of his antagonist, generously fired up the chimney, and—*brought down his antagonist.*" "When," said he, "I relate this anecdote in Paris, I make the *Englishman* go up the chimney"

THE LAW OF LIFE.—The law of life in a complex animal organism is local autonomy, with universal sufferage; the individual cell being the citizen of a federal republic; the various departments being distributed among the different viscera, its senate and legislature in the nervous centres, the council of which is under the dome that crowns the grand structure.—*O. W. Holmes.*

A SCIENTIFIC SMUGGLER.—The Berlin *Montagsblatt* tells this story: In 1805 Humboldt and Guy Lussac were in Paris, engaged in experiments on the compression of air. The two scientists found themselves in need of a large number of glass tubes. These were exceedingly dear in France at the time, and the rate of import was something alarming. Humboldt sent to Germany for the needed articles, and gave directions that the manufacturer should seal up the tubes at both ends, and put a label upon each tube with the words *Deutsche Luft* ("German air"). The air of Germany was an article upon which there was no duty, and the tubes were passed by the custom officers without any demand, and arrived free of duty in the hands of the two experimenters.—*Boston Jour. of Chem.*

SUBCUTANEOUS INJECTION OF ETHER IN PNEUMONIA.—From experience of 14 cases Dr. Barth (*Lyon Méd.*) strongly advocates the subcutaneous injection of about one gramme of ether in adynamic pneumonia. Almost instantly respiration becomes easier, pulse gains in strength and fulness, while the color of the face becomes more natural. In two or three minutes the ethereal odor is noticed in the breath, showing that the volatile liquid has reached the air passages. It is necessary to use the injection at least twice a day, and in severe cases four doses may be thus administered in 24 hours without inconvenience. Dr. Barth has not exceeded this dose, nor has he experienced any trouble from the punctures in the way of serious irritation.—*Glasgow Med. Jour.*, April.

CEREBRAL LESIONS IN SYPHILIS.—Dr. McCall Anderson exhibited before the Glasgow Pathological and Clinical Society a man, aged forty-nine. Twenty-four years ago the patient had syphilis. Abont fourteen years ago, after an attack of rheumatic fever, the patient had an attack of paralysis on both sides of the body—less severe, however, on the right than on the left. His recovery was speeey but never complete, slight rigidity remaining on the right side and some numbness on the left. These symptoms were aggravated after a second paralytic seizure about two years ago, and only began to disappear when the patient was put on antisyphilitic treatment. At the commencement of the first attack there was temporary unconsciousness. For the last three years there had also been a marked tendency to sweating on the left side of the face. Dr. Anderson's diagnosis was a lesion of the motor tract of the brain of the left side, and of the sensory tract of the right side, the degeneration descending to the lateral columns of the cord. The only treatment employed was the inunction of mercurial ointment, which rapidly produced such an amelioration of symptoms that the patient left the hospital.—*British Medical Journal.*

"Digitated Stockings."—We are inclined to think that digitated stockings—that is, stockings with a stall for each toe—would conduce much for comfort, and spare many persons who now suffer from the development of soft corns between the toes, a serious trouble. They would also prove more cleanly than the stockings in common use, because they would naturally absorb and remove the acrid moisture which accumulates between the toes, and which is the general cause of offensive odors from the feet. They will, moreover, give the foot better play, allowing its phalanges greater freedom of action. And, lastly, a well-fitted digitated sock or stocking will remove a mass of material from the toe of the boot, and at the same time give increased breadth and space for expansion across the base of the toes. The new stockings, supposing them to be well cut and fitted, possess many advantages.—*The Laneet.*

The Abortive Treatment of Buboes.—Dr. M. K. Taylor, Assistant-Surgeon, United States Army, describes *(American Journal of Medical Sciences)* a very successful method of treating buboes, adopted by himself. When the glands have reached a moderately large size, he freezes the surface with ether, seizes the gland between the fingers and injects about twenty minims of a carbolic acid solution (gr. iv. to ʒj.). Pain and soreness leave very soon, and the patients are generally able to resume work within three or four days. Dr. Taylor has tested his method on as many as 150 cases. He has used it successfully also in non-specific enlargement of cervical glands.

Successful Gastrotomy for Cancer of the Œsophagus.—At the April meeting of the Medical Society of London, Mr. T. Bryant reported a case of an old gentleman, 65 years of age, who had been sick for several months with cancerous stricture of the œsophagus, and unable to swallow anything but milk, in whom gastrotomy was successfully performed on the plan of Mr. House. In the operation, which he divides into two stages, he prefers to puncture the stomach with a small tenotome, making an aperture only large enough to admit a No. 10 catheter. He recommended the performance of the operation as soon as there is difficulty in swallowing solid food, as it retards the progress of the disease and saves much misery to the patient.—*Lancet.*

The Safest Anæsthetic Known.—Dr. Richardson says that Methyline bichloride, ten fluid drachms, and absolute methylic alcohol. six fluid drachms, constitute the safest known anæsthetic when the methylic alcohol is absolutely pure.—*Lancet.*

Iodide of Potassium in Frontal Headache.—The London *Medical Times and Gazette* says: Dr. Haley states, in the *A stralian Medical Journal* for August, that for some time past he has found minimum doses of iodide of potassium of great service in frontal headache. A heavy, dull headache, situated over the brow, and accompanied by languor, chilliness, and a feeling of general discomfort, with distaste for food, which sometimes approaches to nausea, can be completely removed by a two-grain dose dissolved in half a wineglass of water, and this quietly sipped, the whole quantity being taken in about ten minutes. In many cases the effect of these small doses has been simply wonderful. A person who, a quarter of an hour before was feeling most miserable and refused all food, wishing only for quietness, would now take a good meal and resume his wonted cheerfulness. The rapidity with which the iodide acts in these cases constitutes its great advantage. The morbid condition here described is so very common that we would invite the experience of any gentleman who may see fit to give this remedy a trial.—*Am. Med. Digest.*

Therapeutics of Anæmia.—In his Gulstonian Lectures upon Anæmia, Dr. Sidney Copeland showed that iron acted with great rapidity in enriching the blood corpuscles. He has found arsenic in some instances more efficacious than iron, and as a hematinic ranks it next to that metal. Phosphorus has been given with benefit in a case of idiopathic anemia. Quinia, strychnia, and the mineral acids were of value as aids to iron. Manganese is a dead failure. Oxygen increases appetite and assimilation, but is not a hematinic directly. Transfusion, as a last resort, must be used in pernicious anemia, before the patient is very far gone. He thought well of the use of defibrinated blood by the rectum systematically. —*Louisville Medical News.*

The Uses of Nitrate of Silver.—Dr. Chas K. Mills, speaking of nitrate of silver *(Philadelphia Medical Times)*, said that in nervous disorders he had found it one of the most useful remedies. In posterior spinal sclerosis, it ranked next to iodide of potassium. In chorea he had given it also with apparent success; and sometimes it seemed to be of use in sclerosis of the lateral columns. In epilepsy it was not so good as the bromides, or as the zinc salts with belladonna.—*Med. Record.*

The Sizes of Famous Heads.—In *Nature*, Mr. Tuckett gives the following as the sizes of hats worn by certain distinguished men: Lord Chelmsford, 6½ full; Dean Stanley, 6¾; Lord Beaconsfield, 7; the Prince of Wales, 7 full; Charles Dickens, 7⅛; Lord Selborne, ⅛; John Bright, 7⅛; Earl Russell, 7¼; Lord Macaulay, 7⅜; Mr. Gladstone, 7⅜; Mr. Thackeray, 7⅝; Louis Philippe, 7¾; M. Julien, 7¾, Archbishop of York, 8 full.

THE CANADA LANCET.

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DISEASE REGISTRATION.

It is believed by the profession generally that the public would be greatly benefited by the establishment for the Dominion of a system of disease registration, and the necessity for such a system has on several occasions been urged upon the Federal Government. On this continent but little has yet been done, nor even attempted, in the way of reporting and registering diseases. In Michigan and Massachusetts plans have been put into practice for this purpose, in connection with the State boards of health, and though the methods of collecting are yet very imperfect, it is believed that eventually great benefits will result.

It is very well known that the reporting and registering of deaths alone, however perfect, though very essential and indeed indispensable, does not furnish a reliable index of the state of the public health, nor the amount or proportion of disease usually prevailing, either as regards the entire country, or, especially, different localities; as diseases, and even the same epidemic, may be much more fatal in some localities than in others, and at certain seasons than at others. In order that sanitary work may be more effectually carried out, it is absolutely necessary to know, as accurately as possible, the state of public health in a locality, and not alone the number of deaths, the causes of these, etc. Regarding the approach and spread of epidemics, obviously much more may be learned, and at a much earlier day (which is of the very first importance), by means of a system for reporting and registering diseases, than by the registration of deaths only, which do not take place for some time, long or short according to the nature of the disease, after the appearance or breaking out of the epidemic.

Doubtless, vastly more may be learned, too, concerning the effects of prevailing winds on the spread of diseases, and of the effects of atmospheric conditions and changes upon the public health (through the remote or secondary consequences of prevailing insanitary conditions) by means of a system such as we are alluding to, than by the registration of deaths. In Great Britain some valuable observations have recently been made bearing upon the spread of diphtheria through the conveyance of the contagion to localities many miles distant, by means of the wind. In connection with a system of disease registration, much knowledge regarding all the various and now possibly unthought of methods of the spread of such diseases might be obtained. The advantages to be derived from such a system are so great and obvious that little need be said on this point.

Two or three years ago, as our readers are aware, an attempt was made in Ontario to carry into practice a system for learning the condition of the public health, by soliciting medical practitioners in various localities to furnish weekly reports. But it is hardly to be expected that gratuitous reporting such as then attempted will, for any length of time, yield much, if any, practical good. The reports of diseases in Michigan and Massachusetts are made gratuitously by medical men who agree to do the work; but out of over a hundred voluntary reporters in various sections of Michigan, only between fifty and sixty reports on an average are received weekly by the State board of health. These, though furnishing considerable information, cannot be very satisfactory, as it is very desirable, indeed indispensable, to anything like good practical results, to have a report from every section of country every week. We believe it will not be possible to secure these without some reasonable remuneration for the work done, and it is confinently expected that the Dominion Government will shortly provide a sufficient sum for carrying into practice some plan for the collection of disease statistics.

At the meeting of the Ontario Medical Association, a plan was brought forward by Dr. Playter,

which appears very feasible, and was favorably received. It is, briefly, as follows :—It contemplates the appointment by the Federal Government of 144 observers in different parts of the Dominion, from among medical practitioners of several years' standing and experience, who shall make regular weekly reports of the prevailing diseases in their respective localities. The number of observers suggested will be in the proportion of about one to every 30,000 inhabitants in each Province. Each observer is to be provided with blank forms and addressed envelopes, and shall make a weekly report of the diseases coming under his notice, for which he shall receive from the Government a sum of not less than $25 for the 52 weekly reports. The blank forms proposed, which are somewhat similar to those now in use by the Michigan State Board of Health, are so arranged as to be very readily filled up. The form gives in a printed column, the names of the ordinary prevailing acute diseases, and in opposite columns spaces for registering the number of cases coming under the notice of the observer, the order of prevalence, increase or decrease, severity, etc. The filling up of these blanks need not occupy more than a few minutes' time at the end of every week. As the advantages of these reports become more generally known and appreciated, the remuneration, and also the number of observers might be increased. The total cost of the proposed reports would be about $3,600 per annum.

Of the 65 observers which, under the proposed arrangement, would be allotted to Ontario, one might be appointed in each of the 37 county towns, the remaining 28 equally distributed in the surrounding villages. The same arrangement might also obtain in the other Provinces.

The reports from the different observers throughout the Dominion would be carefully studied and compiled at the central office in Ottawa and the results published weekly in a bulletin, with or without other sanitary information, and distributed throughout the Dominion to physicians, health officers and the press.

Since writing the above, we observe that Dr. Playter's plan has been approved of by the Ontario Medical Council, at the late session, and a resolution passed endorsing it.

AMERICAN MEDICAL ASSOCIATION.

The thirty-third annual meeting of the American Medical Association was held in St. Paul, Minn., June 6th, 7th, 8th, and 9th, 1882. Dr. P. O. Hooper, the Vice-President, occupied the chair in the absence of the distinguished President, Dr. J. J. Woodward, on account of sickness. The meeting was largely attended, upwards of nine hundred members having registered their names. Considerable interest was manifested with reference to the probable action of the Association towards the delegates from the New York State Medical Society, in consequence of the Society having adopted a code which permits consultation with homœopaths, and this matter was one of the earliest to come up for adjudication. Protests against their admission were forwarded by several medical societies in different parts of the Union. These protests were referred to the Judicial Council, which reported at an early stage against the admission of the New York State Delegates. The report was adopted without any discussion, and the matter dropped. The Code of the New York State Medical Society allows the utmost freedom to its members to consult with all *legally qualified* practitioners, and we believe that, notwithstanding the action of the Association, the time is not far distant when other societies will do likewise. We believe that Homœopathy should neither be persecuted nor recognized, but simply let alone. It owes its success largely to the martyrdom it has enjoyed at the hands of the regular profession, therefore let us cease giving it any further excuse for being a martyr. Let it alone, and it will sooner or later drop its distinctive title and merge into the general profession. We do not see that granting permission to consult with homœopaths in diagnosis, surgery, and operative midwifery in any way countenances homœopathy, while, on the other hand, refusing to enter a sick chamber until the homœopath is ordered out, smacks very much of persecution, and the public so regard it. We have great respect for majorities, but majorities are not always right, and so we regard the action of the American Medical Association. The address on medicine was delivered by Dr. Octerlony, of Louisville, who took for his subject the "Progress of Medical Science." The address on surgery was by Dr. W. A. Byrd, of Quincy, Ill., in which he restricted him-

self to the consideration of "Excision of the Intestinal Canal where Covered with Peritoneum," and the address on obstetrics by Dr. H. O. Marcy, of Boston, on the subject of "Uterine Fibroids." Dr. Marcy's lecture was illustrated by microscopic preparations thrown on a screen by the solar microscope. The papers read in the sections were not quite up to the average in scientific value; they were also few in number, and the topics presented did not elicit interesting discussion. The question of establishing a weekly medical journal, instead of a bulky volume of transactions, was again up for discussion, and a board of trustees was appointed with instructions to ascertain whether or not the profession will give sufficient pecuniary support to maintain a weekly journal. Two thousand subscriptions will have to be guaranteed before the committee can enter upon arrangements for its publication. The editor's salary is to be $6,000, including salary of assistants. The journal is to be entitled "The Journal of the American Medical Association," and the subscription price to non-members of the Association $6 per annum.

The social element of the Association was, as usual, one of the grand features of the meeting, and the Committee of Arrangements deserve great credit for the admirable manner in which they discharged their duties. Dr. John L. Atlee, of Lancaster, Pa., was chosen President, and Cleveland was selected as the next place of meeting on the first Tuesday in June, 1883.

THE ONTARIO MEDICAL COUNCIL.

This representative body held its annual meeting on the 13th ult. and following days, the minutes and proceedings of which will be found in another column. The members of the Council are to be congratulated upon one of the most agreeable and successful meetings ever held by that body. One of the local papers stated that the present meeting was "distinguished for the urbanity and courteous deference to each other which should always distinguish the deliberations of gentlemen, not a single circumstance having transpired to mar the harmony of the proceedings from the commencement until the close of the session." We are very much pleased, both for the sake of the profession and the Council, to be able to fully endorse the above statement, and at the same time to express the hope that the bitterness and strife which formerly characterized the proceedings of this body, may never be witnessed again. The various committees did their work quietly, and the general sessions of the Council were conducted in a most business-like manner. The adoption of the Intermediate High School examination, with Latin included, in lieu of the matriculation examination, has been found to work well; and although an effort was made to induce the Council to return to the yearly examination of students, which created so much difficulty and confusion formerly, the proposer did not find a seconder on the Education Committee. The present arrangement, of a primary and final examination, works well, and has both simplicity and efficiency to recommend it to the good sense of the majority. Considerable expense was saved the Council last year by dispensing with the services of the Executive Committee, and the same plan is to be continued. The President, Vice President, and Dr. Henderson, of Strathroy, were appointed as an Executive Committee for the current year, but they are not to be called together unless some unforseen circumstance should arise. Although it was recommended to increase the annual assessment, the Council has wisely refrained from doing so, at least for the present. It is confidently expected that the Local Government will yet see its way clear to give a grant in aid of a building fund, museum, and library, and, if so, there will be no occasion to increase the annual assessment above the present sum of $1.00.

THE ONTARIO MEDICAL ASSOCIATION.

The second annual meeting of this young and vigorous medical society took place in Toronto on the 7th and 8th ult., and was well attended. Dr. C. W. Covernton presided with his usual ability and courtesy. He delivered a very able and interesting address, abstracts of which will be found in another column. A large number of interesting and valuable papers were read, and discussed—the whole of the time of the Association, morning, afternoon and evening, being taken up with the reading of papers and reports in the various departments of medicine. The very large attendance

both last year and this, shows in a most unmistakable manner the wisdom of establishing the Association. The wonder now is that it was not organized long ago. The papers read at the meeting will be published from time to time in the medical journals during the year, and will no doubt be duly appreciated by the profession generally. Although we have no particular fault to find with the papers read before the Association, we hope to see an improvement in their quantity and quality from year to year. What is wanted is the individual experience of members themselves in their various modes of procedure, and not what they may glean from authorities.

The decision of the Association to continue to hold its meetings in Toronto was a wise one, and will tend greatly to the advancement of the interests of the Association. This city is most centrally situated, and is within easy reach of all parts of the Province. The complaint of the want of a proper hall in which to meet, is one which can be easily remedied in future. We are pleased to observe that the Ontario Medical Council has taken steps to dispose of the present unsuitable building, and erect one worthy of the college in some other part of the city—where a suitable plot of ground can be obtained for the purpose. In the meantime a suitable hall will be provided for the meetings of the Association and every attention given to the comfort of members who may honor us with their presence.

Dr. Avery, of Lansing, Mich., was present as a delegate from the Michigan State Board of Health, and gave a very interesting account of the work they are doing in reference to public health in that State. He was invited to take a seat upon the platform, as was also Dr. Fenwick, of Montreal, President of the Dominion Medical Association. Dr. Fenwick entirely disclaimed any feeling of jealousy regarding the success of this Association, or the entertainment of any idea that it would intrench upon the domain of the Dominion Association, as some had feared. On the contrary, he hoped that each Province would establish a similar Association, which remark was warmly applauded by the meeting.

Dr. McDonald, of Hamilton, was elected President, and the next annual meeting will take place in Toronto, on the first Wednesday in June, 1883.

GEORGE W. CAMPBELL, M.D.. LL.D.

It is our painful duty to announce the death of Dr. Geo. W. Campbell, Dean of the Medical Faculty of McGill College, Montreal, which took place in Edinburgh on the 30th of May last. The deceased was born in Scotland in 1810, and early entered upon his medical studies, which he pursued in the University of Glasgow and also in Dublin. After taking his degree with distinction, he sailed for the New World in May, 1833, and settled in Montreal, with the growth and development of which he has ever since been identified. He was one of the founders of the Medical School, which subsequently became the medical faculty of McGill University, and his influence went far toward raising it to its present position. He has been for many years a director of the Bank of Montreal, and latterly its Vice-President, also a director of the Montreal Telegraph Company, and of the City Gas Company. He was for many years on the attending staff of the General Hospital, and was the first physician who became a member of the internal Board of Management, and contributed liberally to this and many other charities. The degree of LL.D. was conferred upon him by McGill College. He leaves one son, Dr. Lorne Campbell, and five daughters. The son is following his father's profession, and accompanied him in his present trip to Scotland, to complete his medical studies there, and was with him when he died. Two of his daughters are married, one in Edinburgh and one in Marseilles.

College of Physicians and Surgeons, Que. —The semi-annual meeting of this college was held in Montreal, on the 10th of May, the president, Dr. Howard, in the chair. After routine, the president announced that at the recent session of the Legislature the college had obtained amendments to the Act with reference to the penal clauses. The tariff passed last year had been abolished, but the college had power to establish another. The following gentlemen were reported as having passed the matriculation examination in medicine:—Messrs. A. Letourneau, H. E. Choquette, A. Rolland, O. Ostigny, C. Collet, J. L. Duffett, T. Charon, C. Pilon, F. Marquis, J. Laberge, L. J. H. Roy, A.

Poole, A. Boucher, A. Foucher de St. Maurice, A. Cheval, A. F. Schmidt, W. Henault, H. Dauth, A. Bernard, J. B. Gibson, H. Roy, E. McKay, A. Delisle, J. Rodier, A. N. Worthington, C. Rochon, L. J. N. Delorme. Twenty-one candidates were rejected. The right of Dr. Keyes, of Georgeville, Que., to register under an Eclectic diploma granted in 1868 by the Province of Ontario was discussed, and legal opinions affirming the right were submitted. The case was deferred. The detective officer, M. Lamirande, presented his report for the past six months, which showed that he had taken out twenty-two actions; eleven were successful, four were dismissed and seven were still pending. He had also collected a considerable amount of arrears of annual assessments. The committee appointed to investigate the charges against Dr. A. M. Ross, suggested the insertion of a clause in the Medical Act to the following effect:—"Any registered member of the medical profession who shall have been convicted of any felony in any court of law, or who shall have been guilty of infamous or disgraceful conduct in any professional respect, shall be liable to have his name erased from the register, etc., and the Provincial Board shall cause enquiry to be made, and upon proof of such conduct, shall cause the name of such person to be erased from the register." The following committee was appointed to draft a new tariff of fees:—Drs. Lemieux and Parke, of Quebec; Lachapelle and F. W. Campbell, of Montreal; Prevost, of St. Jerome; Ladouceur, of Sorel, and Worthington, of Sherbrooke. The following gentlemen, graduates of the respective colleges, received the license as members of the college:—

McGill University.—A. A. Henderson, William Stephen, A. D. Struthers, H. W. Thornton, A. H. Dunlop, R. H. Klock, W. G. Duncan, W. B. Burland, R. C. McCorkill.

Bishop's College.—W. J. Prendergast, N. C. Smillie, J. L. Foley, W. D. M. Bell.

Victoria College.—F. St. Jacques, J. Bte. LeRoy, J. H. Gauthier, F. P. Vanier, S. K. Kelly, J. Bte. Maillet, A. Snyck, H. Manseau, N. Dubeau.

Laval University.—A. Marois, A. Marcoux, A. C. Hamel, I. Cormier, J. Cuerrier, O. Maillet.

Dr. Larocque, Health Officer of Montreal, called attention to the Public Health Bill, now before Parliament. A resolution endorsing it was passed, and the college adjourned.

Ontario Medical Association.—Dr. Macdonald, of Hamilton, President of the Ontario Medical Association, has made the following nominations to the temporary committees for this year:—

Surgery, Pathology, and Anatomy—Drs. Canniff, Oldright, Strange, Toronto; Powell, Edgar, Groves, Fergus; Philip, Brantford; Worthington, Clinton; Eckroyd, Mount Forest; Hunt, Clarksburg; Leslie, Hamilton; and Taylor, Goderich.

Medicine, Materia Medica, and Physiology—Drs. Hamilton and Clemesha, Port Hope; Mullin and Wallace, Hamilton; Fulton, Cameron, and H. H. Wright, Toronto; Gillies, Teeswater; Clark, Oshawa; McKay, Woodstock; Winskel, Brantford; McDonell, Brechin; Metcalf, Kingston; and Morton, Wellesley.

Obstetrics, Gynecology, and Jurisprudence—Drs. Rosebrugh, Hamilton; Bray, Chatham; Burritt, Peterboro'; Yeomans, Mount Forest; Battersby, Port Dover; Bowlby, Berlin; Hall, Meaford; Dunlap, Loughboro'; Hillary, Aurora; Gardiner, London; Holmes, Chatham; Trimble, Queenstown; Black, Uxbridge; Thorburn, Macdonald, Ross, sr., Pyne, sr., and Temple, Toronto.

Opthalmology and Otology—Drs. Reeve and Palmer, Toronto; Bonnar, Albion; Baugh, Hamilton; Ryerson and Rosebrugh, Toronto.

Necrology—Drs. Woolverton, Hamilton; Ghent, Priceville; Knight, Tamworth; Gunn, Durham; Kitchen, St. George; Riddel, Toronto; McTavish, Staffa; James, Burgessville; and Day, of Trenton.

Audit—Drs. G. Wright, Robinson, and Lett, Toronto; Tucker, Orono; Curry, Rockwood; Mackelcan, Hamilton; Secord, Bright; and Bruce Smith, of Sparta.

Papers and Business—Drs. Workman, Sweetnam, Machell, W. B. Geikie, McPhedran, Zimmerman, and King, of Toronto; Inksetter, Dundas; Mullin, Hamilton; Allan, Harriston; Monroe, Dominionville; Stalker, Harwich; and Magill, of Oshawa.

Committee on Arrangements—Drs. Bascom, Uxbridge; Robinson, Markham; Buchan, J. Ross, jr., McFarlane, Pyne, jr., Duncan, Smith, Nevitt, Bryce, Wagner, and McCullough, of Toronto.

HYDROLEINE AND MALTOPEPSYN.—We have pleasure in calling the attention of the profession to the above preparations, introduced by the proprietor Mr. Hazen Morse. These remedies are of the best possible quality, and will be strictly maintained at the highest standard. The many testimonials regarding both articles, from leading practitioners, are a sufficient guarantee of their great value. Without making any invidious comparisons regarding other manufacturers' preparations, or their mode of doing business, the proprietor desires to present his remedies to the profession, and let each physician judge for himself of their merits. He also wishes it to be distinctly understood that these preparations will be kept strictly in the hands of the profession. As the hot weather is now approaching, we would call special attention to the value of maltopepsyn as a digestive in the treatment of diarrhœa from indigestion, cholera infantum, &c., &c. We are glad Mr. Morse has met with the decided success he has, and heartily wish him a continuance of the same.

THE STARR MEDALS TORONTO UNIVERSITY.—At a recent meeting of Convocation Mr. Houston presented the report of the committee appointed to enquire into and report upon the mode of awarding what are known as the Star Medals in the Faculty of Medicine. The report submitted that the present method was not in accordance with the intentions of Dr. Starr, whose bequest is the foundation of the prizes. The report, therefore, recommended for this and other reasons, a complete change in the conditions of competition for these medals, recommending (1) that the medals should be awarded as the result of post-graduate competition ; (2) that the conditions of competition should be framed with a view to promote original investigation on the part of the competitors ; (3) that Starr Medal work should be accepted as a substitute for the thesis for the degree of Doctor of Medicine.

TO GRADUATES OF BELLEVUE MEDICAL COLLEGE.—A second decennial revision of the Catalogue of Alumni of this College is being prepared for publication, and we are requested to ask that all graduates send their present address, at once, on a postal card, to the Historian of the Alumni Association, Bellevue Hospital Medical College, New York.

NEW OPERATION FOR UTERINE DISPLACEMENTS.—Dr. Adams, (*Glasgow Medical Journal*, June, 1882,) describes a new operation for uterine displacements. It consists in exposing the extremities of the round ligaments of the uterus where they lie covered only by the skin and areolar tissue at the pubes, drawing upon them so as to lift the uterus, and then securing the ligaments so as to cause them to form a new attachment to the pubes. The same operation suggested itself at about the same time to Dr. Wm. Alexander, of Liverpool, England, and the latter has successfully treated four cases, the details of which are published in the *Medical Times and Gazette*, April, 1882. The new operation has received the endorsation of Profs. Cleland, Leishman and others, and is likely to become a recognized operation for certain forms of displacement of the uterus.

APPOINTMENTS.—Dr. J. Robinson has been appointed Assistant-Physician to the Toronto Lunatic Asylum. Dr. W. E. Winskel, of Brantford, has been appointed Assistant-Surgeon to the "Brant" Battalion, "Dufferin Rifles," *vice* Dr. W. T. Harris, promoted. R. Dawson, B.A., M.D., of Montreal, has been appointed Surgeon to a section of the Canadian Pacific Railway. Dr. Girdwood, of Montreal, has been appointed Surgeon of the Eastern Division of the Canadian Pacific Railway. Dr. J. W. Cameron has been appointed House Surgeon of the Women's Hospital, Montreal. Dr. Leprohon, Spanish Vice-Consul, Montreal, has been created a Chevalier of the Order of Charles III. Drs. Jas. F. Bell and E. R. Woods have been appointed Assistant-Physicians to the Toronto General Hospital.

MEDICAL MEMBERS OF PARLIAMENT.—The following are the names, so far as obtained, of the medical men who have been elected to the House of Commons in the recent contest :—Sir Charles Tupper ; Drs. Orton, Wilson, Bergin, Hickey, Landerkin, Ferguson (Welland), Platt, Ferguson, (Leeds), Sproule and Springer, Ont. ; Lesage, Blanchet, DeSt.George, Fortin, Grandbois and Rinfret, Que. ; Cameron and Forbes, N. S. ; McIntyre and Robertson, P. E. I.

Dr. Jas. E. Robertson, P. McLaren, and J. F. Gillies have been elected to the Local Legislature of Prince Edward Island.

SUPERINTENDENTS OF INSANE ASYLUMS.—The Association of Superintendents of Insane Asylums held its thirty-third annual session in Cincinnati, on the 30th of May and following days. In the absence of the President, Dr. C. A. Walker, the Vice-President, Dr. J. H. Callender, presided. There was a large attendance of members present, and a number of interesting and valuable papers were read and discussed. Dr. R. M. Bucke, of the London Asylum, ably represented the Canadian section of the Association. He also read a paper on the "Growth of the Intellect."

A TORONTONIAN'S GRADUATING ESSAY.—Dr. James W. Bell, of Toronto, has recently published a pamphlet entitled "Thoughts on Emigration," written in Germany, to obtain the degree of Doctor of Philosophy, in which he was successful. Dr. Bell, who has spent the last four or five years on the Continent, will return to Canada in a few weeks. The pamphlet examines the sources, directions, kinds, and causes of emigration, as well as its social, political, and economical effects upon the individuals and nations concerned.

SYSTEM OF GYNÆCOLOGY BY AMERICAN AUTHORS.—A work bearing the above title is now in course of preparation in the United States, and we have been requested by Dr. Janvrin, of 191 Madison Ave., New York, who is writing the "History and Statistics" of the subject, to bring it under the notice of our readers. All who wish the history of their cases published should send him the reports before the 1st Sept. prox. Blank forms, containing lists of the questions referred to, will be sent to any address. All communications should be addressed as above.

NOTICE.—Medical practitioners in Ontario, whose names do not appear on the Medical Register are requested to send their names and post-office addresses to Dr. P. H. Bryce, Secretary of the Provincial Board of Health, Toronto, in order that they may receive documents published by the Board.

OBITUARIES.—Dr. John Brown, LL.D., of Edinburgh, well known as the author of "Rab and his Friends," died on the 11th of May, at the age of 72 years. Sir John Rose Cormack, M.D., F.R.C.P., died on the 13th of May, at his residence in Paris, aged 67 years.

WESTERN HOSPITAL, MONTREAL.—The "Woman's Hospital" of Montreal, has become amalgamated with the "Western Hospital," under the name of the "Woman's Department of the Western Hospital." The medical staff of the Western Hospital is as follows:—Consulting Surgeon, Dr. Hingston; Consulting Physicians, Drs. David, Kollmyer, and Simpson; Acting Staff, Drs. F. W. Campbell, Kennedy, Wilkins, Perrigo, McConnell, Wood, Armstrong, Cameron and Proudfoot.

SIGN OF CANCER OF THE BREAST.—Mr. Nunn, of the Middlesex Hospital, London, in his recently published work on cancer of the breast, says that the entire breast is displaced. A line drawn from one nipple to the other will be found not to be horizontal but inclined towards the unaffected side, or in other words, the nipple of the affected side will be found *elevated* above the true horizontal line of natural symmetry.

IRON WITH MERCURY.—In his "Aids to Rational Therapeutics," Fothergill says, by giving iron along with mercury, full doses of the latter may be given to very broken down subjects without fear. His own individual experience has been that while he uses mercury very freely in syphilis, no case of salivation or other mercurial trouble has occurred since iron has been systematically given with the mercury.

We have received from Dr. Oldright a letter disclaiming that he "carried about a petition for signatures" on behalf of his appointment as Chairman of the Ontario Board of Health. It was too late for this issue, which was set up earlier than usual, but will appear in our next.

CHRONIC BRONCHITIS.—The following will be found very valuable in chronic bronchitis especially in old people:

℞ Amm. carb. ʒj.
Spts. Æth. Nit.
Syr. Scillæ *aa* ʒss.
Tr. Camph. Co. ʒiij.
Infus. Senega ad. ʒviij.

M.

Sig. A tablespoonful every four hours.

CORONER.—Dr. W. J. Passmore, of Conestogo, has been appointed coroner for the County of Waterloo.

Books and Pamphlets.

ELEMENTS OF PHARMACY, MATERIA MEDICA, AND THERAPEUTICS. By Wm. Whitla, M.D., Queen's University, Belfast. With lithographs and wood-cuts. London: Henry Renshaw, 366 Strand.

The work of Dr. Whitla is a most excellent elementary treatise on these subjects, and well adapted for the use of students commencing the study of materia medica. The work is divided into three separate parts, viz.: I. Pharmacy; II. Materia Medica; and III. Therapeutics; and the drugs are arranged alphabetically. It is, therefore, exceedingly convenient for ready reference by the student. The important subject of pharmacy is treated in a most practical, instructive, and attractive manner. In short, the whole work shows evidence on the part of the author of those special qualifications which eminently fit him as a teacher. The work has been most favorably received by the medical press in England. We have no hesitation in recommending it to students commencing the study of this exhaustive and exhausting subject.

THE INCIDENTAL EFFECTS OF DRUGS. A Pharmacological and Clinical Handbook, by Dr. L. Lewin, Assistant at the Pharmacological Institute of the University of Berlin. Translated by W. T. Alexander, M.D. New York: Wm. Wood & Co

This little work has been most favorably received both at home and abroad. The position and reputation of the author are a sufficient guarantee of the value of the work. In reference to the above we have received a notice from G. S. Davis, Publisher, of Detroit, that he has also under contract an edition of this valuable work, which shall contain all the additions and alterations which are to appear in the new German edition.

A STUDY OF THE TUMORS OF THE BLADDER, with original contributions and drawings, by Alex. D. Stein, M.D., Surgeon to Charity Hospital, etc. New York: William Wood & Co. Toronto: Hart & Co.

The attention of the author was drawn to this subject by the fact of his having four cases of tumor of the bladder under his observation. With this personal experience as a basis, he began the study of the literature of the subject of tumors of the bladder, and the monograph before us is the outcome of this labor. The work is as complete as possible in every practical detail bearing on the nature, symptomatology, diagnosis and treatment of tumors of the bladder. A number of illustrations add to the interest of the subject.

HEALTH AND HEALTHY HOMES IN CANADA. A A short work on Domestic and Public Hygiene. By R. Sproule, M.D., Peterboro, Ont.

In this little *brochure* before us the author has endeavoured to draw attention to the hygienic condition of the people with a view to sanitary improvement. The work will no doubt prove of value to those for whom it is intended, if they can only be prevailed upon to read up on the subject. In the absence of popular works on the subject of hygiene this book will fill a gap, which it is to be regretted has too long remained unfilled. We congratulate Dr. Sproule upon his effort to supply the public with a concise and practical work on the subject.

THE POPULAR SCIENCE MONTHLY for July, 1882. New York: D. Appleton & Co.

The number for July gives a collection of articles, nearly every one of which is a treatise in itself on some topic of public interest. Among some of the subjects may be mentioned, "Plant-cells and their Contents," by Prof. McBride, of Iowa; "Physiology of Exercise," by DuBois-Raymond; "Ethics of Vivisection," by Dr. Samuel Wilks; "Protoplasm," by Dr Francis M. White; "The Mechanics of Intermittent Springs," "Relation of Music to Mental Progress," "The Jews in Europe," etc., etc., all of them interesting topics.

THE ORIENTAL CASKET—Edited by Emerson Bennett, and published by J. Lum Smith, 912 Arch Street, Philadelphia, $2.00 per annum.

The above interesting monthly Magazine is devoted to poetry, tales, sketches, essays, wit, wisdom and humor from the world of literature, science and art. It will be supplied, with the "Canada Lancet," for $4 50 per annum, in advance.

Births, Marriages and Deaths.

On the 20th June, Dr. W. R. D. Sutherland, of Winnipeg, to Nellie, second daughter of Dr. Richardson, Toronto.

On the 23rd of May, Dr. Maxwell, of Bear River, N. S., in the 37th year of his age.

On the 10th ult., Dr. James McIlmurray, of Toronto, aged 82 years.

At Coldstream, on the 12th ult., Dr. H. W. Lloyd, formerly of London, Ont., aged 31 years.

THE CANADA LANCET,

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

VOL. XIV. TORONTO, AUG., 1882. No. 12.

Original Communications.

LACERATION OF THE CERVIX UTERI.*

BY J. ALGERNON TEMPLE, M.D., ETC., TORONTO.

Prof. of Obstetrics and Diseases of Women, Trinity Medical College.

Mr. President and Gentlemen,—I purpose very briefly to bring to your notice to-day the subject of "Laceration of the Cervix Uteri." It is not my intention to dwell on the causes, symptoms or mode of treatment; such information any of us can easily get from the modern text-books; nor have I anything new to advance. In a Society like ours, we can do ourselves much good by recording our own personal experience, and we are met together to-day for that very purpose.

My object, then, is to detail my own experience, and to bring forth, I hope, the experience of those amongst us who have taken an interest in this all-important subject,—one of the newest and most important advances recently made in Gynæcology.

To Dr. Emmet, of New York, we are undoubtedly indebted for all we know on this subject, and though the operation is meeting with great opposition from a host of practitioners both on this continent and in Europe, yet I believe their opposition does not stand on any sound basis,—rather on prejudice, than clinical experience—from all I can gather from the various discussions that have been going on recently. I find that the strongest opponents of the operation are men who have had little or no experience in the operation, and who are both writing and talking against it for reasons best known to themselves. Yet I would ask, can you name an operation that has not met with opposition? Had the original promoters of ovariotomy not manfully struggled on through the most discouraging records and opposition, this grand triumph of modern surgery would not now be in existence, and many a valuable life saved through its instrumentality would have been consigned to an early grave.

That this operation—Trachelorrhaphy, or, Hystero-Trachelorrhaphy—has a brilliant future before it, I am convinced, and the enemies to the operation now, will, I expect, become its strongest supporters hereafter. One of the strongest proofs, to my mind, of the stability of this operation, is in the fact that the original operation introduced by Emmet in 1862, has not yet been modified.

I do not belong to that class of practitioners who are easily led away by a new or novel procedure. For some years back I have been patiently following up the literature on this subject, and it is only within the last year that I have become convinced of the absolute necessity of this operation in certain cases, and that nothing short of the operation would effect a cure. Understand me distinctly, I do not think that every case of laceration requires to be stitched up; undoubtedly there are some cases so slight as to cause no serious inconvenience to the patient, and others, again, which unite of their own accord,—the mere rest in bed, with attention to common rules of cleanliness, being quite sufficient to cause union.

It is not immediately after labor that these cases come under our observation; in a large majority of cases the tear is small, gives rise to no special symptoms, most difficult in fact to detect from the swollen condition of the cervix after delivery, and unless the tear is so extensive as to cause serious hæmorrhage—so as to compel us to examine the woman with a speculum—they pass by unobserved.

According to the statistics furnished by Emmet, this accident occurs in 32.80 per cent. of cases of delivery; this point, however, is not yet definitely settled; that the accident is of frequent occurrence, there is no doubt. That the age of the patient or the social position of the woman is no important factor in the frequency of the accident is important, as it appears to be as common in the young woman as the one more advanced in years, in the rich woman as in the poor. And that this accident is not always due to the medical attendant is worthy of remembrance. In the most careful hands it has occurred; it is liable to occur to any one of ourselves, though using the utmost care and caution.

* Read before the Ontario Medical Association, June 7th, 1882.

The most frequent site of laceration is in the anterior lip, inclined to the left side ; the next in frequency being double laceration. It occurs in tedious as well as in rapid labors, though the rapid deliveries, in all probability, furnish the most cases.

The abortionist furnishes many cases, probably because of his ignorance in the use of instruments ; likewise also the forceps, when used by unskilful men, give as many cases ; here, however, it is unjust to blame the forceps, but rather the man who used them should be blamed. Cases arising from this source are very frequently bilateral in their nature.

A lacerated cervix gives rise in after life to very many complaints of females. Prominent amongst the effects, we notice irregularity in the menstrual flow, followed sooner or later with excessive menstrual discharges, and during the inter-menstrual period the woman complains of excessive leucorrhœal discharges, pains in the back and thighs, with a sense of weight in the pelvis ; she becomes ænemic and nervous, loses her appetite, and her general health fails. The process of involution is seriously interrupted, so that the uterus remains large and heavy ; the mucous membrane of the cervix, as also the cervical tissue, undergo cystic degeneration sometimes to an excessive degree, so that it becomes completely honeycombed ; the torn edges of the cervix soon become thickened and everted, and from the constant uterine secretion accompanied by the increased weight of the uterus, it excoriates itself by friction against the vaginal walls. This condition is frequently mistaken for ulceration and treated as such by caustics, which only aggravate the already diseased condition. Now these conditions which are gradually brought about and in all probability the result of some years, baffle all attempts at cure unless the lacerated cervix is restored by an operation. Still other more serious conditions than those mentioned, may result from this accident. I allude to pelvic cellulitis. A low form of inflammatory action is set up, which eventually develops into a true attack of peritoneal cellulitis ; it is found situated, as a rule, between the folds of the broad ligament on the same side as the laceration exists. This will in time lead to lateral displacement of the uterus through contraction of the lateral ligaments. Prolapsus of the uterus is another condition which may result from the ever-increasing weight of the uterus pressing down, and without there being any laceration of the perineum, as occurred in one of the cases I operated on. And lastly, there is but little doubt that cancer of the cervix is not an infrequent sequence to this condition.

I will now briefly detail my own experience and the results which have followed the operation.

Case I. M. J., æt. 27, married four years, mother of one child ; previous to marriage was always healthy ; first and only labor was very tedious ; forceps used to effect delivery ; convalescence very slow. Some months after delivery complained of constant pain in the back with dragging pains within the pelvis, frequent desire to micturate, profuse leucorrhœa, locomotion difficult and painful. After she weaned her child her menstrual periods returned in frequent and excessive discharges ; uterus gradually became so low as to almost protrude through the vulva, and eventually did so. Was treated by different practitioners in many and various ways without deriving any benefit, and for the past two years her life has been a burden to her, her uterus being all the time external to the vulva except when in the recumbent position. She could not pass any urine unless she first pushed the uterus up with her finger and retained it there.

On examination I found complete procidentia of the uterus with an extensive laceration on the left side, the laceration measuring 2½ inches in length ; the torn edges were thick and everted ; the uterine cavity measured 5½ inches long ; the mucous membrane of the cervix, from constant exposure to friction from the clothing, resembled ordinary skin ; her general health was much impaired ; menstrual periods frequent and excessive, and she was quite unable to attend to her ordinary daily household duties. I advised the operation of trachelorrhaphy, to which she consented. After carefully denuding the edges, I brought them together by putting in nine silver wire sutures ; she was placed in bed and weak carbolic acid injections used twice daily. On the ninth day I removed the sutures and found complete union throughout the whole line of incision. As a precaution I kept her in the recumbent position for four weeks ; at the end of that time I allowed her to go about and for safety's sake put in a pessary to assist in maintaining the uterus in position. In six weeks from the time of operation the uterus was reduced in

size 1½ inches; her first menstrual period after the operation only lasted four days. She walked to my house, a distance of over two miles, with perfect ease; all her pains and uncomfortable sensations had disappeared and she expressed herself as feeling quite well for the first time since her confinement. In her case she had no laceration of the perineum whatever, and yet the uterus, from its constantly increasing size, had prolapsed completely; and this very simple operation entirely restored her to health, which I claim could not have been done in any other way.

Case II. M. H., æt. 40, married; one child, three or four miscarriages. Since the birth of her child ten years ago, she has never been well; menstrual periods profuse, constant pain in the back and thighs, profuse leucorrhœa, loss of appetite, pain in connexion, general failure of health, nervous and irritable. Vaginal examination revealed double laceration of the cervix, with erosion of the everted edges; uterus tender and enlarged and retroverted, with cystic degeneration of the cervical glands.

Many and various have been the plans of treatment she has been subjected to, without deriving any benefit. I advised her to submit to the operation. Five sutures were put in on one side and four in the other. Removed them on the tenth day; good primary union throughout, without any bad symptoms, and the woman, now three months since the operation, is rapidly recovering her health.

Case III. History almost identical with previous case, though not so bad, having only a single laceration. The operation in her case has also been a complete success and she is rapidly regaining her health, with all her old uterine complaints disappearing.

Case IV. M. T.; a case of double laceration of long standing; her monthly periods very irregular and excessive in quantity, with constant profuse leucorrhœa, pains in back and thighs, total inability to get about from great impairment of the general health. In her case I put in eight sutures, seven of which united; the one nearest to the point failed, leaving however but a very small point ununited, which will, I think, granulate; but as it is only very recently since I operated, I cannot speak with much certainty.

Case V. M. S., æt. 38; mother of five children, youngest five years; her most prominent symptom is excessive menstruation, which amounts to menorrhagia, lasting ten days, during all of which time she is confined to bed; her general health is very poor and she is of a nervous, irritable disposition. I have for the past two years tried every possible means to relieve her, but without effect. The late Dr. White, of Buffalo, told her nothing but the operation would cure her. I operated on her about four weeks ago. Unfortunately, two days after the operation, her periods came on with great violence, and I regret to say the operation has entirely failed, as not one of the sutures united, which I attribute to two reasons mainly: first, the uterus was so dense and hard that I could scarcely get any needles through the tissues, in fact I broke several of them; and, secondly, I did not get the sutures as deep in as I should have wished. I purpose, however, to try it again.

Case VI. My friend, Dr. Macdonald, kindly allows me to report this case in his practice, in which I assisted him. M. E., æt. 40, a well-developed woman of German descent, the mother of nine children, has suffered from pain in the back and bearing-down since first delivery. Menstruation has since then been painful and profuse, though regular, with excessive leucorrhœa and general weakness. Examination revealed rupture of the perineum to verge of anus. Uterus slightly prolapsed; cervix ruptured laterally, about 1½ inches in extent torn; edges swollen and everted, and cystic degeneration of cervix. Trachelorrhaphy was performed. Nine silver-wire sutures were inserted; eight of these were successful, the one nearest the right lower edge failed. Since the operation the cervix has become much smaller, the woman's general health greatly improved. Twenty days after the operation, the patient herself volunteers the statement, "I cannot thank you enough, Dr., for the comfort I now enjoy." Dr. Macdonald, at this operation, used a double hooked wire-twister of his own design, which was a great assistance in securing the sutures firmly. Perineorrhaphy is to be done later on.

I may briefly say that my mode of operation is that recommended by Dr. Emmet, viz.: pare the edges of the laceration with either scissors or knife (I prefer the scissors) and bring the edges together by silver-wire sutures, keep the patient quiet in bed, remove them on the ninth or tenth day, and daily use warm but weak carbolized vaginal injections.

If no other reason can be advanced in favor of the operation than the prevention of cancer of the cervix, I think it strong enough, as it is the opinion of many gynæcologists of the day that this lesion is a frequent exciting cause of cancer. And I take the liberty, in conclusion, of copying my closing remarks from Dr. Thomas' last edition on Diseases of Women: "No part of the body of a woman is so liable to the development of cancer as the uterus; no part of the uterus so liable to it as the neck, and no tissue of the neck so liable to it as the glandular lining membrane. Exposure of this by eversion, the result of laceration would, theoretically, be supposed to be a fruitful exciting cause of that affection, and practical observation abundantly supports theory in reference to the matter. My own observation has for several years made me feel sure of this, and that of Brieskey, Emmet and Veit is recorded to the same effect. This alone offers a valid indication for the closure of lacerations attended by local engorgement and irritation."

ON VENESECTION. FACTS? THAT ARE FACTS, IF YOU PLEASE, WHEN THEORIES CHOOSE TO IGNORE THEM.*

BY J. CLARK, M.D., OSHAWA, ONT.

Mr. President and Gentlemen,—In the *Globe* of June 3rd is the following, part of an editorial on a political subject: "In the good old days when the chirurgeons had full sway in the sick chamber, before modern medical science and modern common sense had brought the life of hope to the diseased and suffering, blood-letting was the one great panacea for all the ills that flesh is heir to. If the patient had, or was supposed to have inflammation, he was bled to reduce it. If, on the other hand, he was pale and debilitated, bleeding copiously was the thing to strengthen him. If he had bile in the spring, or catarrh in the fall, there was nothing like a good bleeding to restore him to health. No matter how feeble or poorly nourished his system or how badly in want of a tonic, the first care of the sapient knight of the lancet was to bleed him within an inch of his life. If, as occasionally happened, the patient by virtue of a good constitution and the recuperative forces of nature, slowly regained strength, in spite of this killing treatment, we can readily imagine the self-satisfaction with which the professional blood-letter would point to him as a trophy of his skill and a living demonstration of the healing powers of phlebotomy. Happily for humanity the days of the blood-letter are passed in enlightened countries, though a half-fossilized specimen is still occasionally to be met with, who is never tired with vaunting the superiority of his own drastic method, and deriding the quackery of the modern scientific treatment."

I think this description of the evils of the old system so admirable, that I avail myself of it as an introduction and as nearly all that need be said as to the *abuse* of venesection. I present myself with great pleasure as the "half-fossilized specimen," who will endeavor to defend the *use* of blood-letting in certain cases, "vaunting" it as admirable, and the neglect of which is often disastrous.

For about thirty years the practice of venesection has been pretty generally abandoned by the profession, and I think I can show without sufficient reason, and that the result has not redounded to the public benefit, but the contrary, and hence I have been stirred up to address you. Although in the departments of physiology and pathology very great advances have been made, I doubt very much, on the whole, whether the percentage of success in practice is very much larger under modern treatment than under that so very much condemned of about forty years ago, when I began practice. In this particular matter of venesection, I have no doubt the opposite is the case. Beginning life so long ago, and ever on the look-out for results, I have come to the conclusion and assert that no advantage towards the cure of disease has been derived from the abandonment of venesection; on the contrary, that serious loss of life has ensued and will continue to ensue, till venesection is restored to its proper place among our means of cure. So thoroughly convinced of this fact am I, that on receiving from the Secretary notice of the meeting of this Association, I wrote to the president, who very kindly encouraged me in my desire to address you on the subject. I regret that my facts are so ill-arranged and that time and health were not given me to enable me to place them properly before you, as you all know so much depends on the ability of the advocate; but in the absence of

* Read before the Ontario Medical Association, June 8th, 1882.

more capable defenders, I present myself with such facts as my memory can produce, in the hope that some attention may be directed to the matter and that the subject may be reconsidered. That the practice was formerly grossly abused there can be no doubt, but I agree with a recent writer that more harm had arisen from the abandonment of the practice than ever was done by its greatest abuse. What was the reason of this ignoring the lancet? Probably the prejudice in the public mind; the Bible expression, "the blood is the life"; the utter inability of reconciling theories; the trouble of the operation, the cacoëthes scribendi; Dr. Sangrado; the love of change and the self-sufficiency of youth, possibly are some of them.

> The world is naturally averse
> To all the good it sees or hears,
> But swallows nonsense and a lie
> With greediness and gluttony.
>
> Fools rush in where angels fear to tread.

The early advocates for the abandonment of the lancet were not of such transcendent ability; there were hundreds of professional men who were far in advance of them who continued to bleed, and I distinctly recollect reading some cases of Dr. Bennett, given with the utmost complacency, but which nearly all terminated in death, the recuperative powers of nature not being adequate to the occasion. The hue and cry, however, were too much, and it was extremely difficult to do what you deemed right in the face of the universal condemnation. But that the neglect of venesection, even where it is not immediately fatal, causes in hundreds of cases a prolongation of the disease, and leaves to nature to effect in weeks or months what the lancet, properly handled, can relieve at once and cure in a day or two, is a fact of which I am perfectly assured. I do not mean to recommend any drainage of the system, for the mere loss of blood will do little towards the cure of the disease, but I pursue a plan that I was induced to adopt long ago, when blood-letting was in vogue. I observed then that reliance was placed on mere bleeding and not on producing an impression on the system. The plan is this. In cases of inflammation the patient to be treated as follows: to be raised from the recumbent position (for left in that position the greater part of his blood could be removed without the desired result). He is to be raised and kept in a sitting upright posture, the puncture to be sufficiently large to allow the blood to flow rapidly so as to induce faintness as quickly as possible, which will be evidenced by the relief of pain and dyspnœa if the chest is concerned, and followed by profuse perspiration which of course should be encouraged by covering the patient with warm wraps; if the syncope be complete, he must be placed recumbent, if not, semi-recumbent. The ordinary medicine not to be dispensed with. There is no fear from great loss of blood if this method be followed to the letter, and that it will put an end to the inflammation I pledge you my word. I assert that in cases of inflammation of the lungs, of the serous membranes, congestion, apoplexy, venesection is admirable and nothing else so effectual. I never repeat the bleeding, nor do I think it necessary if properly done. I have used (and do use) the lancet in hundreds of cases, and will mention a few of them. Some years ago I bled a man who had congestion of the lungs threatening serious complications, who had been ill for weeks, and who was at once relieved and is well now. Another under my own care, who for several days had fever and congestion of the brain, whose case becoming serious, I told his wife I would bleed next day if he were not better. As he was no better on my next visit his wife begged for a consultation, to which I assented. My medical friend, after convincing himself and admitting that the case was really grave and evidently getting more and more so daily, said that he had no experience in bleeding, indeed, had only once used the lancet in his life—in a case of Asiatic cholera, which recovered. He accepted my assertion that bleeding would relieve and supported me. He did this and we had the satisfaction of leaving our patient free from fever and pain, in a profuse perspiration and in fact from that day he quickly recovered. Subsequently my patient went to California, and so grateful was he that he borrowed from others to enable him to discharge his indebtedness to me. Again, a case of pneumonia; the man had been ill from Saturday to the following Thursday, discharged his non-bleeding doctor and called me in, his friends believing that as he was getting worse daily he was in imminent danger; that, too, was my opinion. I did not hesitate to bleed (although I warned them that, coming in so late, I would not be responsible for the result), in the manner I have described, with the result that he was at once relieved and quickly got well. In

cases of apoplexy, I have succeeded in apparently hopeless cases, by the use of the lancet, in restoring sensibility and preventing paralysis. I recall a case where a man, suffering from determination of blood to the head, requested his doctor to bleed him; he declined, but gave medicine; in a week afterwards he had an attack of apoplexy, followed by paralysis and was utterly useless as long as he lived. I think the inference is obvious. Within a fortnight, lately, I bled three patients for pneumonia, apoplexy, and congestion of the lungs, respectively, all of whom speedily recovered—the case of apoplexy without paralysis. She was 76 years of age; consciousness began to return while the blood was flowing and she is now quite well. The pneumonia case was a most alarming one.

I do not lose any of my cases of inflammation where I can use the lancet. Has it not often occurred to many of you to observe how nature has come to the relief of the over-laden system by discharging blood from the nose, lungs, bowels, womb, etc., with resulting relief to those organs; and no doubt it was not mere chance or caprice that established the custom of bleeding, but deduction and observation of these facts, that induced our ancestors to establish it, and it required only the self-sufficiency of the present day without any adequate substitute to abolish it, only for a time I believe; and I believe also that many years will not pass over your heads before a practice so natural and beneficial will be restored, to the saving of many lives and to the credit of common sense. It is lamentable to see and hear of so many deaths of young men from pneumonia, as I have done, when in my conscience I believe they ought to have lived. It is impossible, I think, to ignore the fact that we have gone from one extreme to the other, and that we have rushed into greater danger than we have escaped. I am supported in some of these views by Prof. J. Wharton Jones, in an article published in the *Lancet* of November 2, 1879. He writes: "Instead of simple reform of indiscriminate practice, complete reaction in the opposite direction has taken place, as is so common when extreme views on any subject come to be called in question." He asks whether by abstention from blood-letting altogether, as is the present fashion, inflammations of important organs are not often allowed to run a long and disastrous course, which might be prevented by a timely abstraction of blood in such quantities that the loss of it could be in nowise injurious to the patient? He answers this question in the affirmative, and gives as illustrations cases of iritis. He quotes Dr. Marshall Hall's axiom, that "in the operation of venesection, the quantity of blood lost before fainting comes on, *whilst the patient is in the erect* position, is never more than is requisite for the cure of the inflammation and never so great as to prove hurtful to the patient." He says the late Mr. Wardrop remarked, "that of a number of persons bled for inflammatory diseases, those who had lost the *largest quantity of blood by the fewest repetitions* of the operation have made the most rapid recovery." Also that the doctrine that the inflammatory process consists merely in "proliferation," virtually ignores the vascular congestion and the symptoms depending on it, such as "rubor cum calore et dolore"; the doctrine thus refutes itself by omitting cognizance of the condition on which depends the supply of the materials for the maintenance of the increased activity of cell multiplication, constituting proliferation. It is needless, I hope, for a man of my age to say that he has nothing to gain personally from having written this paper, but the satisfaction of having fulfilled a duty, alas! most inadequately. The exhibition of myself is painful to me, and I fear, in consequence of the imperfect manner in which I have discharged the duty, will be without result; but I shall have the satisfaction of feeling that I have done, what in me lies, to restore a much abused remedy to its former place in our regard, and if I do not succeed, some one coming after me will. Truth will prevail against prejudice as all other things sooner or later.

> "Facts are chiels than wunna ding
> And munna be disputed."

Some years ago, feeling indignant that so potent a remedy as venesection had not been tried in some cases of spinal meningitis, I addressed "a plea for the lancet" to the *London Medical Journal*, intending (as the editor kindly inserted the letter) to follow it up with a statement of cases; but hopeless of any good arising and want of health prevented. I advised a friend to try the lancet, who assured me that he had met with great success by its use. Pray dismiss prejudice from your minds, and in severe cases of inflammation try what the lancet will do for your patients, and I am sure you will be satisfied that my assertions are not exag-

gerations, but veritable facts. More than this, I say you are bound to prove, after what I have said, that I have told truth or falsehood.

REPORT OF THE DELEGATES OF THE ONTARIO MEDICAL ASSOCIATION TO THE INTERNATIONAL MEDICAL CONGRESS, HELD IN LONDON, ENGLAND, AUGUST, 1881.*

BY W. B. GEIKIE, M.D., F.R.C.S.ED., TORONTO.

Mr. President and Gentlemen,—Having had the honor of being one of your delegates to the late International Medical Congress, which met in London, England, last summer, and having been requested by your worthy President, Dr. Covernton, to do so, I beg leave to submit to you, on behalf of my co-delegates and myself, a short report with reference to that great gathering. To weary you by attempting to give a synopsis, or anything like it, of the work of *any one* of the many sections into which the vast concourse of medical men then assembled was divided, would be entirely out of place, inasmuch as many, if not all, of the gentlemen present, have already read digests of these, far better than could be given in the short compass of a delegate's report.

At the grand opening in St. James' Hall, on Wednesday, August 3rd, nearly 3,000 members were present. H. R. H. the Prince of Wales, one of the patrons of the Congress—H. M. the Queen being the other—and by express invitation of the Prince, His Imperial and Royal Highness the Crown Prince of Germany, with many of the most distinguished men of Great Britain and other countries, honored themselves, and the Congress, by being present.

The opening address of the President, Sir James Paget, was what might be expected from so eminent a speaker, one of whom our profession may well be proud, a most eloquent, learned, wise, worthy, and withal a most humble man—a truly great and universally-respected member of our calling, which he truly characterized as offering, among all the sciences, the most complete and constant union of those three qualities which have the greatest charm for pure and active minds—novelty, utility, and charity.

* Read before the Ontario Medical Association, June 1st, 1882.

The various sections met in the forenoon at ten o'clock in the rooms set apart for that purpose, and in the afternoon at two, of each day. The general meetings were all held later in the afternoon in St. James' Hall. One feature of the Congress was especially interesting and useful to those who availed themselves of it, viz., the exhibition of models and specimens illustrative of cases. As an instance: Prof. Charcot himself showed a life-sized model, prepared under his own supervision, and since presented to St. Thomas Hospital Museum, of an old woman who died of locomotor ataxy, showing the extraordinary degenerative changes sometimes occurring in this disease in the bones forming the articulations. Beside the model was the entire skeleton of the same patient. The museums of the several metropolitan hospitals, too, furnished their very best specimens, illustrative of almost every form of surgical and very many forms of medical disease.

Living patients, with rare skin and other diseases, were daily exhibited at an early morning hour—9.30—and such remarks were made in elucidation of particular cases as were thought necessary by the gentlemen who had charge of them. Members visited, either by special appointment or as they might desire, various hospitals daily, and the utmost pains was everywhere taken to make such visits both pleasant and profitable in a practically scientific point of view.

The Congress work proper was done in the sections, which were as follows: Anatomy, physiology, general pathology and morbid anatomy, materia medica and pharmacology, medicine, surgery, military surgery and medicine, ophthalmology, diseases of the skin, a sub-section—diseases of the throat, diseases of the ear, diseases of the teeth, mental diseases, diseases of children, obstetric medicine and surgery, and, lastly, state medicine.

Each of these sections had its president, vice-president, and a list of gentlemen named the Council, in which latter body great pains had evidently been justly and wisely taken to have the profession from various countries adequately represented. This is just what in such a gathering was to have been expected; but to me, as a Colonial delegate, and to all of my confrères with whom I spoke on the subject, it seemed strange that the Colonial profession, so far as any separate mention went, was simply entirely lost sight of. India sent

7 members to the Congress; Africa, 6; West Indies, 2; Mauritius, 2; Malta, 1; Australasia, 20; Ceylon, 1; Canada, 23. Yet no Colony had its profession acknowledged by having had even one of the 62 Colonial delegates placed on any of the section councils. It seemed a great oversight, particularly in the case of our most distant and most populous Colonial possessions, and many thought, including every Englishman to whom I mentioned the matter, that although not done in the least degree intentionally, it was nevertheless unquestionably a blunder, and one which many would gladly have tried to rectify had the matter been sooner brought before their notice.

Professor Grainger Stewart, of Edinburgh, and Dr. Duckworth, of London, one of the Secretaries of the Medical Section, took much interest in this matter so far as Canada was concerned, and the latter gentleman was particularly anxious at least partially to correct the omission by having our Canadian profession alluded to in some way—as at the informal dinner with which the Congress ended—and some of us were told to be ready for something of this kind; but there was so much confusion at this dinner after the serious part of it, *i.e.*, the dining, was over, that it was with the utmost difficulty Prof. Ackland, of Oxford, was given a moment or two to move what, so far as I could hear, was a well merited vote of thanks to the President of the Congress.

Shortly before leaving England, after having carefully thought over the matter of the non-recognition of the Colonial profession, I wrote to the President, Sir James Paget, on the subject, referring, as a Canadian delegate, chiefly to Canada. The substance of the letter was as follows:—

That although I had not the pleasure of knowing the President personally, yet as with us in Canada as elsewhere, his name is a household word; and as the worthy President of the recent "International Congress" the liberty, as one of the representatives of the Canadian profession, was taken to congratulate him on its very great success. I hoped and believed that much good will result from it, and felt sure that it will tend to unify the profession in many ways. One thing, however, the result, doubtless, of mere oversight, was to be regretted, viz., the fact that no mention was ever made of the Canadian profession as being represented at the Congress, except in the printed list of representatives where the names of the delegates appear. As individuals, our delegates, and there were only a few sent in that special capacity, were all treated with the utmost possible courtesy; but it was rational to suppose that the thousands of medical men we represented, would have been glad to have had the satisfaction of being referred to as "the Canadian profession" as distinct from that of any other foreign country. But in England, strange as it appears to us, the colonies in this and in many other ways too often receive but scanty public recognition. In Canada, the standard of medical education was pointed out as very high indeed—very far beyond what is required for the most part in the neighboring Republic and in many other countries, and it is constantly improving. Under such circumstances it was but simple truth to say that as Canada closely follows Great Britain as a model in regard to professional education, it would undoubtedly have gratified the Canadian profession, at a gathering like the Congress, to have received some separate mention as a large and respectable body, duly represented. I am satisfied that what is now spoken of, and which was mentioned to me by several of my fellow-delegates, was a mere omission, owing probably to the matter never having been thought of. This letter was written not at all in the spirit of fault-finding, but merely with the view of preventing the recurrence of anything of the same kind at future medical gatherings to which large colonies like Canada, thousands of miles distant, may send special representatives.

Sir James Paget sent me a prompt and courteous reply, acknowledging the receipt of my letter, and explaining that the Canadian and other Colonial delegates had been viewed as British medical men, and for this reason alone the Colonial profession had not been specially recognized; but expressing satisfaction at the matter having been brought up, in order that any similar cause of complaint might be avoided in future.

I could not help, however, although accepting without the slightest hesitation the explanation given by Sir James as the only correct one, wondering that British India throughout all its vast extent, with Calcutta and other large cities; Australasia, with Melbourne, Sydney, Auckland, and numerous other large centres of population; and even the tiny strip of territory known as the

Dominion of Canada, stretching between the small bodies of salt water known as the Atlantic and Pacific Oceans, with Halifax, Montreal, Hamilton, and Toronto, and other cities and towns;—I could not help wondering, I say, that the idea of giving representation anywhere to the many thousands of medical men living in all those vast regions, appears never once to have occurred to the gentlemen who had charge of these details.

In regard to the general arrangements made, and admirably carried out, for the entertainment of the members of the Congress, they were all that could be desired, and more extensive than anyone could have conceived of as at all possible.

The daily programme admirably combined work with pleasure; and the hospitality shown to thousands of professional men, strangers in London, was very great. Banquets, dinners, garden parties, conversaziones, excursions of all kinds, and sight-seeing without end, were the order of the day. The royal palaces, and gardens, and the great city residences of many of the nobility were thrown open to us, and everyone seemed intent on making our visit, during the Congress week, to the world's metropolis what it indeed was, a week of red letter days, never to be remembered but with pleasure, and the pleasure of these remembrances such, as will not fade with the lapse of years.—All of which is respectfully submitted.

COMPLICATIONS OF TYPHOID FEVER.

BY H. P. YEOMANS, B.A., M.D., MOUNT FOREST, ONT.
(Member of the Ontario Board of Health).

Phlegmasia dolens, or phlebitis, as a complication of typhoid fever, occurring in case of a male patient, is very rare.

Dec. 31, 1881. E. G., æt. 33, called at my office. Said he had been ill since Thursday, when he had a chill; feels feverish, face somewhat swollen; sent home and ordered to go to bed.

Jan. 1. Morning temperature, 101; evening, 102⅘.

Jan. 2. Slept well last night. Temp., morning, 100⅗; evening 103⅗.

The following is morning and evening temperature, taken at 8 a.m. and 8 p.m.:—

Jan. 3rd. 100⅗ morning, 103⅕ evening; 4th. 103⅘, 103⅗; 5th. 101⅘, 104; 6th. 100, 102; 7th. 99⅗, 102⅘; 8th. 100⅕, 101; 9th. 99, 102⅘; 10th. 99⅗, 101⅘; 11th. 100, 101⅘.

From the 12th until the 22nd, the temperature was not higher than 99 in the morning and 100 in the evening.

On the 22nd, in the morning, he felt very well; had a good appetite; had slept well every night for ten nights; bowels and all functions apparently normal; tongue slightly furred. Sat up all day and transacted some business. In the evening the temperature rose to 102.

Jan. 23rd. Evening temperature, 102; 24th. morning, 102⅘, evening, 103. 25th. 101⅘, 101⅘; 26th. 99⅕, 102⅗; 27th. 100, 102.

There was no material change from the 27th until Feb. 3rd. On that morning the temperature rose 99⅗. During the day the symptoms remained the same until 5 p.m., when a very severe chill and shivering fit came on. This was one of the characteristic chills which followed at irregular intervals and accompanied the phlebitis. At this time the left leg was considerably swollen; the saphena vein was tender. There was a great deal of pain in the leg, which increased on the slightest movement. Immediately after the chill there was a sudden elevation of temperature, which rose in two hours from 99⅗ to 105, and then, in two hours, fell again to 103⅕.

Feb. 4th. 101⅗, morning; 104 evening; 5th. 100, 101⅗; 6th. 100⅗, 102; 7th. 100, 103; 8th. 101, 103⅗; 9th. 103, 104⅘, noon; chill to-day; 105⅗ at 3 p.m., 104 at 8 p.m.; 10th. 103⅗, 103⅗ at 3 p.m., 102⅕ at 8 p.m.; 11th. 100⅗, 100⅗; 12th. 99, 101 at 7 p.m., 105⅗ at 10 p.m.; to-day had four natural motions in succession, sat up on bed-pan in the bed; had a very severe chill again; 13th. 104⅗, 103⅗; 14th. 99⅗, 100⅗; 15th. 100, 102; 16th. 99, 102; to-day had a slight chill; 17th. 102, 102⅗; 18th. 99, 100; 19th. 98⅘, 100; 20th. 99⅗, 100⅗; 21st. 99, 103 at noon, 100 at 8 p.m.; no chill, leg felt sore and saphena vein tender to-day; 22nd. 99, 100. After this the temperature did not rise in the evening above 100 and convalescence rapidly advanced.

In noting the prominent features of the case, we may observe that the fever commenced on Thursday, Dec. 28th, with a chill. He called at my office two days afterwards and was ordered to go home and remain in bed.

On the third day the temperature was taken for

the first time, 101 in the morning and 102$\frac{3}{5}$ in the evening. On the eighth day the evening temperature reached the highest point, 104, and after that declined. On the fourteenth day the evening temperature was 101$\frac{3}{5}$, and it rose no higher than 100 during the succeeding ten days.

During the second week, the symptoms plainly indicated the approach of the convalescence that followed in the third week. On the twenty-sixth day there was a slight relapse, caused by over-exertion and mental excitement in business.

During the whole course of the fever, which lasted thirty-five days, including the relapse, there were no symptoms of delirium, tympanites, or lesions of the intestinal glands, no sudamina and only a few petechiæ.

On the thirty-third day some symptoms of phlebitis appeared, such as swelling of the leg and tenderness of the saphena vein. On the thirty-seventh day the first chill occurred. These chills were very severe, amounting almost to convulsive twitching of muscles of limbs and body similar to chorea. The chill lasted fifteen or twenty minutes and was followed by four or five hours' of profuse perspiration. Before the chill came on, a feeling of apnœa was complained of by the patient. The sudden rise and fall of temperature, also, was very remarkable.

There were three very severe chills and one very slight chill. The first on the thirty-seventh day, the second on the forty-third day, the third on the forty-seventh day, and the fourth on the fifty-first day. On the fifty-sixth day the pain and soreness of the saphena vein increased, but no chill occurred. After the sixty-first day the evening temperature was not higher than 99 and convalescence was thoroughly established. Great care was exercised, however, for some time, in order to prevent a relapse.

I am not prepared to assign any cause for the phlebitis in this case, at present. Several opinions are advanced by different writers, to which I shall not refer; my intention is to state the symptoms and history of this case as observed at the time. I may, however, note the fact, that no premonitions of phlegmasia appeared at the commencement or during the attack of the fever, and that the phlebitis may be termed in this case, a serious sequel to a mild case of fever.

Correspondence.

To the Editor of the CANADA LANCET.

SIR,—It was, and still is, my intention to refrain from controversy regarding the Chairmanship of the Provincial Board of Health. I do not even know, as you assume to do, the name of the gentleman who signs himself as "Junius."

But my attention has been directed to your recent editorial, in which are some mis-statements put forward as matters of fact, which, if allowed to pass uncontradicted by me, might be assumed to be undeniable.

I must therefore ask you to publish my distinct and emphatic denial of your statement that I "carried about the city petitions for signatures." I understand that a document in favor of my appointment was drawn up by one influential friend in the House at the suggestion of another, and was signed by all the medical members of the House, except one. I do not, to the present day, know the contents of this paper; and as it is the only one to which, so far as I am aware, signatures were asked, it is hardly necessary for me to state the fact that I neither wrote, suggested, dictated, nor "carried about" any document of the kind.

Your second mis-statement of fact occurs in your remarks about my report on the City Hall. If you had referred to the report itself, you would not have needed to state that there were "no sug-"gestions as to improving the unsanitary condition "of the present buildings," as you would have found many, some stated specifically and the rest implied, in pointing out defects. Had the *Mail* reporter supposed that any person of experience would have based a serious criticism on a hurried newspaper report, he would probably have been more careful in epitomizing. The clause from which you quote reads as follows:—"With the facts in view, to "which I have drawn your attention, I think it is "quite apparent that the present buildings and "surroundings can never be altered to meet the "fullest requirements of health, without so tearing "them to pieces, and adding to them, that very "little of the old structure will be found in the "new. In other words, new buildings will be "more economical, and are necessary for the main-"tenance of sound and energetic men in the City "Hall. All that can be done with the old is to

"make certain temporary alterations, to do away "with the more glaring defects."

Members of the Provincial Board, in common with many of their professional brethren, have not been remiss in pointing out causes of typhoid fever in Toronto and in advocating reforms; but whether it was necessary for the Board, when pressed with much urgent business to refer, at its first meeting, to the unusual amount occurring last year, and to consider hurriedly a question involving much more than the points you allude to, and which will require a carefully prepared report;—whether the Board expects me to assume the *role* of giving "instructions to my colleagues," as you propose when criticizing my address;—whether it will interfere with the discharge of my duties if I should decide upon continuing to divide between University College and the Toronto School of Medicine the same number of hours that a lecturer, say in Practice of Medicine and Clinical Medicine, devotes to one school:—or whether my having given seven lectures last year, in the Veterinary School, in the place of a sick friend, will so interfere; these and other questions of a more trivial nature raised by you I might by some be expected to discuss. But I agree with you that such discussions would be neither profitable nor "in the in-"terests of the public and the profession"; I will therefore refrain from them; and should you consider it necessary to again depart from the course of action implied in this quotation, I trust your readers will not expect me to trouble you or any other journalist with a reply.

I am, sincerely,

WM. OLDRIGHT.

Toronto, 17th June, 1882.

[Before writing the article to which Dr. Oldright alludes, we took pains to make due enquiry on every point. A medical gentleman in this city, whose veracity has never yet been called in question, told us that Dr. Oldright personally asked him to sign a petition recommending him to the Government for the chairmanship of the Board. The other points are admitted. The clause of the report above quoted shows on the face of it the unpractical nature of the recommendations].—Ed. LANCET.

SPIRÆA ULMARIA.

To the Editor of THE CANADA LANCET.

SIR,—The use of this drug in the treatment of senile enlargement of the prostate gland has, in three cases, given me wonderful results. About ten months ago I was called to see T. B., æt. 68, in the city of London, and found him suffering from retention of urine. I had him put immediately into a hot hip-bath, the hot water coming well over the pubes, and administered a drachm of paregoric and twenty drops of Hoffman's anodyne every thirty minutes. He remained in the bath about fifteen minutes, when hot wet cloths were applied over the bladder. Nearly two hours elapsed before this method of treatment had the desired effect. After the bladder had been evacuated, I found on examination per anum, hypertrophy of the prostate. I then explored the urethra with a No. 10 catheter, found no obstruction and the instrument glided into the bladder without difficulty. Two weeks subsequently to this attack, I was called again to the same patient. I tried my former method of treatment, but it failed. I also failed to introduce the catheter. Matters were becoming alarming, and I was about to send for professional assistance, when it came from another source, viz., an old woman. She volunteered the information that the patient wanted a dose of Queen of the Meadow (the common name for Spiræa Ulmaria) and that if he got it, it would cure him in quick time. She said some could be procured in a few minutes. I asked her to get it. It was brought, an infusion was made and half-a-pint given to the patient, and in fifteen minutes he desired to micturate and emptied his bladder without difficulty. Since that time the patient has needed no medical or surgical aid to rid him of his old enemy. If he gets on a spree and his old trouble threatens him, he takes Queen of the Meadow tea and rejoices in being saved. In two other cases of this nature in which I used this drug, the results were just as satisfactory. I have tried it on myself in health and find it acts as a diuretic and astringent, since it sometimes causes smarting pain as the urine passes along the urethra. Its antispasmodic properties are very marked at the sphincter vesicæ, and I think much of its virtue in the affection named results from its power to overcome the contraction of the neck of the blad-

der arising from irritation in the prostatic region. It is my opinion that, in many cases of retention of urine from prostatic enlargement, the enlargement is not, *per se*, the main obstacle, but rather the spasmodic contraction of the sphincter vesicæ, as the result of a sudden congestion or inflammation of the prostate gland. In conclusion, I would ask for this drug a fair trial by the profession.

Yours truly,

J. Baugh, M.D.

Hamilton, June 19th, 1882.

Reports of Societies.

NEW BRUNSWICK MEDICAL SOCIETY.

The annual meeting of the above-named society was held in St. John, N.B. on the 18th ult., Dr. Steeves in the chair. There was a large attendance of members present. After routine, the President read his annual address, a paper on "Insanity." In dealing with the subject, he noticed the causes, increase, the relations of civilization to insanity, and, lastly, its prevention.

The election of officers was then proceeded with, and resulted as follows :—President, Dr. S. Z. Earle; Vice-President, Dr. Todd; Secretary, Dr. Duncan; Corresponding Secretary, Dr. Coleman; Treasurer, Dr. P. R. Inches; Trustees, Drs. Inches, Walker, and Allison; Committee of Arrangements, Drs. Addy, Earle, and Coleman.

Dr. Bayard, President of the New Brunswick Medical Council, reported that some changes had been made in the Medical Act at the last session of the Legislature. During the year ending July 18th, 1882, the names of 178 persons had been entered on the Medical Register; of these 121 are natives of New Brunswick, 20 of Nova Scotia, 16 of the United States, 4 of Ireland, 5 of Scotland, 7 of Quebec, 4 of England, 2 of Prince Edward Island, 1 of Newfoundland, 1 of Spain. Of the registered qualifications 134 are from American colleges, 17 from British, 11 from Canadian. Three have registered from continued practice in this Province, 3 possess Provincial licenses, 1 has been licensed by the Council of Physicians and Surgeons of New Brunswick, 9 have both American and British qualifications, 4 gentleman have passed preliminary examinations. $563 has been received as fees for registration, as fees for the certificate $30, for preliminary examinations $20. There has been expended $314, leaving a balance on hand of $299.

A discussion then took place upon the propriety of consulting the Society upon any contemplated change in the Act before going to the Legislature. The members next visited the General Hospital. They were received and conducted through the building by the Medical Superintendent, Dr. Crookshank, Drs. Earle, Coleman, and Walker. They then proceeded to the Lunatic Asylum, through which they were conducted by the Medical Superintendent, Dr. Steeves, after which the company partook of a bountiful repast.

The Society met again in the evening, when several interesting papers on different medical subjects were read by Drs. Musgrove, Coleman, Gray, Allison, and Atherton, and were discussed by the members present.

The next annual meeting of the Society will be held in St. John on the third Tuesday in July, 1883.

BATHURST AND RIDEAU MEDICAL ASSOCIATION.

A meeting of the above-named Association took place at Smith's Falls on the 28th of June. There was a good attendance present.

The President, Dr. Cranston, delivered an able and appropriate address. He referred to the many changes that had occurred in the district, dwelling upon the death of Dr. Blackwood, who for forty years had practised his profession at Pakenham. He reviewed the proceedings of the recent session of the Medical Council of Ontario, explaining the changes that had been made, and expressed his satisfaction at the harmonious manner in which that body had performed its duties. He informed them that an inspector for the district had been appointed, who since accepting the office had convicted two illegally practising "doctors."

The following officers were elected for the ensuing year :—*President*, Dr. Cranston, Arnprior; *Vice-Presidents*, Dr. Horsey, Ottawa, and Dr. Burns, Almonte; *Treasurer*, Dr. Hill, Ottawa; *Secretary*, Dr. Small, Ottawa. *Council*, Drs. Baird, Pakenham; Dickson, Pembroke; McCallum, Smith's Falls; Groves, Carp; Lynch, Almonte; Preston, Carleton Place; Sweetland, Grant, and H. P. Wright, Ottawa.

Dr. Powell read a valuable paper on "Heart

Disease." He dwelt upon the significance of murmurs and the prognosis that might be given. A general discussion took place on several points brought forward.

Dr. Wright reported a case of "Diabetes Mellitus," and also one of "Phantom Abdominal Tumor." Dr. Cranston reported a unique case of "Gravid Uterus," with cervix greatly elongated. Some microscopical demonstrations of *Tænia solium* were given by Dr. Small.

Drs Baird, Burns, Horsey, and Prevost were appointed to prepare papers, and the meeting then adjourned to meet in Ottawa, in January, 1883.

Dr. Atcheson, of Smith's Falls, entertained the members of the Association in the evening.

Selected Articles.

CHANCRE OF THE LIP AND EPITHELIOMA.

BY R. C. LUCAS, F.R.C.S., GUY'S HOSPITAL.

Two cases illustrating the resemblance which these two affections often present have lately been attended on the same day, and a careless observer having regard only to the local disease, and ignoring the history and the age of the patients, might easily have fallen into serious error. Nor is the diagnosis always easy when no fact is omitted which might influence the conclusion; but in the two cases before us, despite the similarity in appearance, there is corroborative evidence in each case which leaves no doubt as to the nature of the disease. One patient is a man about thirty years of age and unmarried. He has a thickening of the edge of his upper lip slightly to the right of the centre. In the middle of this thickening there is a superficial abrasion upon which the secretion and epithelium cake and scale. The whole lip is a little swollen, but if you pinch it between your finger and thumb you feel a hard circular rim to the sore about the size of a sixpence.

Now look at the other man. He is a respectable married man, upwards of fifty years of age. He has a superficial sore on his lower lip to the left of the median line. The surface is almost exactly similar to the other man's sore; it is cracked, and has a tendency to scab and scale. It too has a thickened rim, but if you pinch it you find the resistance less that in the other case; but so similar are the sores, that if their positions could be changed I do not think you would be able to distinguish one from the other. Yet one is a cancer, the other the initial stage of syphilitic infection. How, then, can one distinguish them? First, the age and state of life make it probable that the young man's sore is a chancre, the old man's an epithelioma; but thirty is not too young for epithelioma, nor is fifty proof against syphilis, although with age impetuosity yields to discretion. Epithelioma below thirty-five is very rare. Last year I operated upon a man aged thirty-eight for a cancer recurrent in the cheek and glands of his neck, which had been operated on some time before in the country; but this is an exceptional case, and the age is of the greatest importance in aiding our diagnosis, Cancer occurs at the time when the tissues begin to wear out, and epithelioma especially is almost always traceable to long continued irritation.

Next, the position is a distinguishing mark in these two cases, for epithelioma is rare upon the upper lip. The position of the sore upon the old man's lip is almost characteristic; it is just opposite the notch in his teeth made by his pipe. Further, he confessed to always having smoked an unwaxed clay. If mere contact with porous clay is sufficient, after years to set up cancer, you would conclude that there should be a corresponding sore on the upper lip; but the lower lip suffers most, for owing to the weight of the bowl the lower lip is pressed upon as well as rubbed.

A chancre may occur upon either lip as it results from the virus having come into contact with a chance crack. In many cases it will depend upon whether the person is underhung or overhung; for the lip most exposed is most liable to crack, and at the same time most likely first to meet in an embrace. Hunter maintains that neither the blood nor any of the secretions could convey the poison, but this is now known to be untrue. His reasoning on this point was most fallacious. If the blood, he argued, could produce syphilitic inflammation in a healthy wound, no object affected with constitution syphilis could escape from venereal ulcers; for every time he was bled or he scratched himself with a pin the small wounds thus caused would be transformed into so many chancres. Hunter overlooked the fact that the man's tissues by the inoculation were protected, for the time at least, by re-inoculation, but that to another both blood and secretion might prove contagious. There is abundant evidence now of the contagious nature of the blood during the secondary stage, of the vaccine from a syphilitic infant, and of the pus from the secondary ulcers on the lips; hence there is no need to follow Ricord in his loathsome suggestions that these chancres of the lips were the result always of illicit contact.

The time during which the disease has been developing is another most important consideration in determining its character. The old man states that he has had ulceration, more or less, for five years, but that it is only during the last few months that the lip has caused him inconvenience. The other man counts his trouble by weeks, and gives

six weeks as the time since he first noticed the sore. Five years is an exceptionally long history for so small a development of epithelioma, and it is very questionable whether the sore has been epitheliomatous all this time. Rather it is probable that had he left off the irritating cause two or three years ago he might have escaped from the disease from which he is now suffering, for doubtful ulcers distinctly traceable to local irritation will often heal when relieved of the exciting cause. It is now about two years since I saw, in consultation with Dr. Orton, of Kensington, an old gentleman who had been condemned by another surgeon for cancer on the inner side of his left cheek. He was suffering from an ugly-looking ulcer with thickening edges, very like an epithelioma, but upon inquiring into the history we found that it had not been noticed more than six weeks or two months, and immediately opposite we found a tooth stopped with an irregular amalgam stopping. It was clear that the ulcer was excited by the tooth, and I suggested that the tooth should be extracted, after which the ulcer completely healed. Had, however, the irritating cause been allowed to remain for months, it is highly probable that the sore in this old gentleman might have taken on an epitheliomatous character, and the medical man who first saw him would then have been correct in his diagnosis. Thus the time is of great importance in separating an epithelioma from a simple ulcer and chancre.

There is a stage in both cases when the glands under the jaw will be found enlarged; and I remember two patients came last year with sore lips, both with short histories and enlarged glands, and I refused to give a positive diagnosis till I had had an opportunity of watching them. One of these developed a syphilitic eruption during the following week, while the other proved to be suffering from an epithelioma growing much more rapidly than the one we have now under consideration. Time will always settle the diagnosis; for it is seldom, unless the patient takes mercury, that the eruption of syphilis is delayed beyond two months. The man before us with a chancre has now upon his arms and trunk a few brownish papules, which place the diagnosis beyond all doubt.—*London Practitioner.*

AN OVARIAN TUMOR WITH RARE COMPLICATIONS.

Dr. A. P. Dudley and Dr. H. C. Coe, of the house staff of the Woman's Hospital, in a joint communication published in the *New York Medical Journal and Obstetrical Review* for July, 1882, remark that it is a well-recognized fact that statistics of ovariotomy are among the least satisfactory of any in surgery. For a man to report that he has had so many "successful cases" may mean simply that he has had the good luck to secure a run of uncomplicated ones, such as would have recovered under the hands of any other operator. The public, and even the medical public, are too prone to judge of success by the outward results alone, overlooking the skill, judgment, boldness in meeting emergencies, and the care and anxiety in after-treatment, which a surgeon has bestowed upon a desperate case, and in spite of which it has terminated fatally. To judge of an ovariotomist by the bare statement of the number of his patients who have survived the operation would be most unjust. So varied are the elements which enter into *every case* of ovariotomy, and which render it complete in itself, that it is quite impossible to institute close comparisons, either between individual cases or between the statistics of two different operators. They then give the history of a case that occurred recently in Dr. Thomas's service at the hospital. The patient had a severe illness at the age of 16—an acute intestinal trouble of some sort. After that she was always obstinately constipated, and occasionally had severe colic, with vomiting and tympanites, and was said to have passed gall-stones on several occasions. When she entered the hospital she had been married 20 years, but had had no children, and for 10 years she had not menstruated. Eighteen months before her admission her health began to fail, and she noticed a slight enlargement of the abdomen, attended with severe pain, localized on the left side. Soon after this she passed several concretions by the urethra, and began to discharge fæcal matter and gas by the same channel. The tumor grew slowly, confined almost wholly to the left side, and attended with constant intense pain and marked gastric disturbance It was tapped shortly before her admission, but no fluid was obtained. Dr. Thomas regarded it as uncertain whether the tumor was an ovarian cystoma or an uterine fibrocyst, but felt that its removal would be quite impossible on account of its complete fixity and firm adhesion to all surrounding parts. He made an incision four inches in length to the left of the median line, this being the most prominent part of the tumor, thus dividing the abdominal muscles. The sac, which was found to be firmly adherent on all sides, was punctured, and a quantity of dark-brownish, colloid material evacuated, with the patient turned upon the side. The external incision was extended to five inches; the cyst opening was also enlarged, and the operator introduced his hand and broke up a number of secondary cysts, removing their contents. The cyst was found firmly adherent to the intestines and pelvic viscera. Accordingly, the edges of the cyst-opening were stitched into the edges of the wound, a Thomas's double drainage-tube being introduced into the sac, brought out at the lower angle of the incision,

and held in position by interrupted wire sutures. The patient died on the eighth day. At the autopsy the visceral and parietal layers of the peritoneum were found so firmly united by old adhesions that it was with difficulty that the cavity could be opened at all. The liver was adherent to the diaphragm, anterior abdominal wall, stomach, duodenum, and transverse colon. The spleen was surrounded by old adhesions. The coils of small intestine were adherent to the abdominal parietes, and so firmly glued together that they formed an inextricable mass. The intestines were also adherent to the posterior wall of the bladder, the superior and posterior aspects of the uterus, and to the surface of tumor. Douglas's fossa was entirely obliterated. Upon separating the adhesions near the fundus of the bladder, a cavity of about the size of a hen's egg (diameter four centimetres) was found, which seemed to be a portion of the general peritoneal cavity, shut off by adhesions. It was bounded in front by the posterior surface of the bladder, at its upper third, laterally and posteriorly, by the mass of adherent intestines. This cavity communicated both with the small intestine and with the bladder, in the former case, by two fistulous openings about six mm. in diameter, situated close together, and each leading into a separate knuckle of small intestine. As nearly as could be ascertained, one communication was with the ileum, the other with the jejunum. There were three openings from this false cavity into the bladder, situated side by side, and separated only by narrow bridges of tissue ; the largest measured one centimetre in diameter, the others two and three mm., respectively. The bladder was thus opened through its posterior wall, near the fundus. The cavity above described contained a mass of soft, yellowish fæcal matter, and three hard, black calculi of irregular shape—all too large to have passed, fully formed, through the fistulous openings in the intestines. (Analysis of these calculi showed them to be enteroliths). The pelves and calyces of the kidneys were much dilated, the renal parenchyma being atrophied and the seat of a chronic diffuse nephritis. No evidence of an acute interstitial nephritis. The dilated pelves contained a dirty, brownish, purulent fluid, having an offensive urinous odor. Both ureters were greatly dilated, the dilatation extending along their whole course, the calibre of the right being nearly equal to that of the small intestine. They contained an offensive fluid similar to that in the pelves. The bladder was capacious, its long diameter being eleven centimetres. It contained soft fæcal matter, turbid urine, and gas. The uterus was normal. On the right side the adnexa were completely buried in a mass of adhesions. Upon the left side the site of the ovary was occupied by a polycystic tumor, which filled the pelvic cavity and extended upward into the abdomen. Its diameter was four centimetres. It was adherent to the small intestines and to the sigmoid flexure, which lay behind it. The upper half of the tumor had a peritoneal covering, while the lower half was devoid of it. The growth was found to be a multilocular ovarian cyst, having one large cavity, the inner wall of which was covered with papillomatous growths. This inner surface was of a black color, and in places was sloughing.

"BACK SLING" FOR FRACTURED CLAVICLE.

By Lorenzo Hale, M.D., Albany *(Medical Annals)*.

E. M. Moore, M.D., of Rochester, has well shown the faults of the treatment with the axillary pad. While the theory of treatment as developed by him is demonstrably correct, yet his bandage —"a shawl," "eight inches in breadth" "when folded"—appears to be somewhat cumbersome and warm ; and, in passing over and in front of the injured shoulder, it lies over the depressed fragment, and hides the fractured bone away from inspection ; and, when firm extension is attempted, pressure appears to come on the already depressed fragment.

These undesirable conditions are obviated by the use of a sling, applied by holding one end of a narrow roller bandage against the scapula of the sound side, and then passing the bandage under

the forearm of the injured side near the elbow (the elbow being first bent and drawn back), thence up, around and over the same forearm and across the back to the axilla of the sound side, then in front of and over the sound shoulder, to unite with the

end held at the place of beginning (see figure). It is not always necessary that the bandage should be thus officinally crossed on the back; but a "back sling" forming parallel lines on the back, although slightly cooler, is not quite as secure.

And further,—instead of finding support for the hand by a sling in front, fastened over the fractured clavicle,—a narrow strap may pass from the wrist across the chest to the "back sling" on the sound shoulder. The front support is thus entirely away from the weak shoulder, and tends to lessen the strain and chafing of the bandage on the sound shoulder.

This dressing admits of the application of a compress over the inner fragment, to be held down with adhesive plaster; but, except when the clavicle is broken into more than two fragments, a compress will seldom, if ever, be necessary, since the "back sling," in drawing back the humerus, makes traction upon the clavicular portion of the pectoralis major—opposing the clavicular fibres of the sterno-mastoid which have drawn the inner fragment upward—and thus pulls the inner fragment of the clavicle downward.

The outer fragment is also acted upon by this drawing back of the humerus, for the scapula is pushed upward and inward toward the spinal column, and, through the medium of the scapulo-clavicular articulation, the outer fragment of the clavicle is brought upward, and extends outward, and the axes of the two fragments are firmly held in one continuous line. Hence the "back sling" in holding back the humerus, is seen to fulfil what have always been specified as the indications in the treatment of fractured clavicle, viz., to support the shoulder in a direction *upward*, *backward* and *outward*.

Similar anatomical conditions as these above detailed are obtained, although to a less degree, by simply pinioning the forearm of the injured side behind the back; this posture is more uncomfortable and less effective than the "back sling," but may be necessary in the treatment of fractured clavicle in imprudent or insane patients, where it would not be safe to permit even the slight freedom of motion allowed by the "back sling."

This "back sling" should be of some material that will not cut nor wrinkle, such as suspender webbing or a wide leather strap; it is light and cool; it leaves the site of the fracture *at all times accessible*; it safely allows a moderate and comfortable degree of motion in the forearm and hand; it gives the patient an immediate sense of security and relief, and is followed in practice by a result that approximates perfection. As it is to be applied over a portion of the clothing, which serves in a measure the purpose of padding, it is agreeable to the patient.

Aged persons and others whose flesh is soft or œdematous requires some form of protecting splint or padding, as a saddle or muff on the forearm, and also padding in front of the sound shoulder, and in some cases daily tightening and slackening of the bandage; on this account it is convenient to have the ends of the "back sling" fastened with a buckle.

SODIUM NITRITE IN EPILEPSY.

BY W. T. LAW, M.D., F.R.C.S., ENG.

In addition to the extensive list of remedies employed or recommended in the treatment of epilepsy, I wish to suggest the trial of another which I was led to select upon theoretical grounds in a case of this disease which recently came under my immediate and close observation for 18 months. As evidence of my facilities for noting the effect of the remedies tried, it is proper to state that the patient, Mr. M., æt. 29 was received into my own house for supervision and treatment, and that arrangements were made by which any attacks occurring either out of doors or during the night could be noted. Patient's father died of apoplexy, but no other family history bearing on nervous disease could be elicited. Mr. M.'s habits were said to have been unexceptionable as regards drink and morals, and there was no suspicion of syphilis. In mind he had always been "below par," and though sent to various schools, learned very little. Had no fits at this time, but suffered from severe headaches which often kept him in bed. Entered a college, and after a good many years spent in trying to pass examinations, had his first distinct attack of epilepsy about a year and a half before he came under my observation. From that time he had numerous fits. In 1880 he had a seizure, followed by maniacal excitement for some hours. When he came under my charge I noticed that he was above the middle height, fair, and muscularly well-developed; clean shaven, nearly bald, congested face, neck, and hands. The latter were nearly always moist and often cold; nails much bitten. Contracted pupils; marked want of intelligence in manner, slow speech, and great deliberation of movement. When walking, he partially extended his arms, as a rope-dancer might, and would touch any object he passed as an aid to muscular co-ordination, while the gait was jerky, uncertain, and slightly ataxic. Mental powers enfeebled and memory defective, though he exercised control over his property. In disposition he was reserved and secretive, and would carefully treasure up dirty fragments of paper and other rubbish found in the street. Curiosity and cunning were largely developed, and when a seizure was approaching uncontrollable fits of giggling often occurred. His great dislike of medication and intense desire of concealing his fits when they occurred, rendered him difficult to treat, and he

would deceive as to his sensations, condition of bowels, etc., whenever possible. After much trouble I got him to take one daily dose of bromide of potassium, 40 grains in the morning, with which I at once began, as a wound on the bridge of the nose indicated a recent attack From this date, Aug. 9, 1880, fits occurred at the rate of two a week on an average, but always during the night, until Nov. 18, when I watched a seizure from the commencement at about 9 p.m. He was dozing over a newspaper, held upside down, which he had been pretending to read, when a low, peculiar cry indicated an attack. The eyes became fixed and staring, the chin advanced, and the face livid (I noticed no initial pallor). The chest walls seemed motionless and respiration suspended, but a gurgling sound resembling retching closely followed the initial convulsion of the limbs, which began in the arms and legs, which were forcibly extended, the former being rotated inwards and the fingers extended. Both sides seemed equally affected, or nearly so. With this the head rotated strongly to the left, the jaws closed firmly, and the pupils slightly deviated from their usual contracted state. Accompanied by deepening lividity, clonic spasms of the usual kind and twitchings of the mouth succeeded, and I think most affected the right side. The convulsion lasted about 20 seconds, and terminated in relaxation and stupor; saliva tinged with blood from a bitten tongue running freely from the mouth. The lividity disappeared, and the pulse, which during the paroxysm had been frequent and tense, was now slowed and softened, and perspiration moistened the skin. The sphincters were unaffected, and I found the urine normal the next day. Thinking the bromide was losing its effects in warding off day seizures, I gave borax till Dec. 20. In this time two day fits and seven at night were noted. Then followed bromide as before, with short intervals of iron and aloes, till May 30, with the result of eleven attacks in the waking and fifteen in the sleeping state. Belladonna in twenty-drop doses with bromides of potassium and ammonium were now given till Oct. 30, when three day and twelve night seizures were observed. Nitrite of sodium in twenty grain doses was then administered until Feb. 6, when he passed from under my care. During this period a remarkable improvement take place. Three fits only were noted, diurnal on Dec. 15 and Jan. 10, and nocturnal Dec. 16. During these latter months the gait and general manner showed a change for the better. The giggling which formerly heralded a seizure almost entirely disappeared. A disposition to overeat, and post-prandial drowsiness, greatly lessened, and his friends declared they had never seen him look so well before. Among the few particulars, however, in which but little improvement took place, was one I omitted to mention in its proper place, an offensive exhalation from the skin resembling the odour of corduroy and differing from any I have observed among mental or nervous cases. The general treatment was uniform, and consisted in careful dieting, restrictive in bulk, absence of all excitement, attention to the bowels as far as practicable, and a constant watchfulness to repress the tendency to mischievousness which so often accompanies brain deterioration.

The object of this paper is to advocate the claim of nitrite of sodium to a trial in epilepsy. So far as I am aware this drug has not been used as a remedy for epilepsy, but assuming that the nervous discharge or explosion is associated with cerebral anæmia—a view which receives clinical support from the initial pallor of the face and high tension of the radial pulse, as well as from the usefulness of belladonna in certain forms, and of nitrite of amyl during the paroxysm—it seemed natural to look for a remedy capable of influencing the vaso-motor apparatus.

On three or four occasions (under bromides) the bladder and rectum emptied themselves, but, so far as I know, evacuation of the vesiculæ, seminales, voluntary or otherwise, was not a feature of this case. The fits nearly always took place after dinner, from 8 to 9.30 p.m. Mr. M. denied any aura or warning, but I believe headache often heralded a seizure, as did certainly giggling without cause, and drowsiness. He would eat bread in large quantities, if allowed, and I am firmly convinced of the truth of Dr. Radcliff's dictum, that epileptics should be rather underfed than otherwise.—*Practitioner*, June.—*Medical Abstract.*

THE TREATMENT OF CHRONIC RINGWORM OF THE SCALP: A NEW METHOD OF EPILATING THE DISEASED HAIR.—That chronic ringworm of the scalp is a difficult disease to cure, every practitioner will admit. There are two propositions, as regards treatment, which I desire to bring under the notice of the profession. But, first, I must briefly refer to a factor in the problem we are called upon to consider—a fungus growing on and in the hairs, extending deeply into the follicles as far as the roots.

In a paper published in the early part of last year, I pointed out that two things were essential in the treatment of this disease: first, some drug which is capable of destroying the fungus, and so preventing its further development; and, secondly, some vehicle to carry this drug to the part of the follicle where the fungus exists and grows. Arguing, from analogy, that certain chemical substances, called antiseptics, had the power of destroying certain low forms of vegetable life, such as bacilli, micrococci, and bacteria, I suggested that thymol or menthol should be used as the parasiticide, and that chloroform would answer the purpose as the absorbent. But, as the latter was volatile, I added oil to the compound to prevent evaporation.

While trying this liniment, of thymol, chloroform, and oil, in a large number of cases, I was struck with the fact, that in some of them, in spite of the constant application of the remedy, the disease appeared on other parts of the body, and also on other parts of the head previously free. It seemed difficult to understand that, in a strictly antiseptic medium, spores could be carried from part to part and live; but such seemed to be the case, for in some instances, when the liniment had been used too freely, and had run down the neck, fresh spots of the disease showed themselves in that region. During the time that I was considering this difficulty, I found that Koch, in Berlin, had been making experiments on bacillus spores with various antiseptics, and found that those spores lived and developed even after being placed in carbolic acid (one part in twenty) for one hundred and ten days. This, I think, is a very strong argument that neither oil nor fat of any kind should be used when the full action of an antiseptic is required.

Of course, I am aware that all the best authorities recommend strong ointments, mercurial or otherwise, though for a very different reason from what I have been describing. They care little or nothing about the antiseptic action, so long as inflammation of the follicle, more or less severe, be produced. The spores are said not to live in inflammatory products (Thin). But surely cases are not uncommon in which the disease is transplanted to healthy parts by means of the discharge. I have seen a case in which croton-oil was used to a single patch, and in a short time the head was covered with small centres of infection. In this case the spores were carried in the discharge. And, again, have not all the old chronic cases we see in practice—some of them of four or five years' duration—been cases treated by constant attacks of inflammation, and yet with the result that spores have been found with ease? My view is that to produce inflammation of a slight kind is useless; and that a severe kind is unjustifiable, on account of the risk of destroying the follicles altogether, and producing baldness.

To return to the question of fats; if fat of any kind from without protects the spores, as Koch asserts, the natural fat or sebaceous matter must have a similar effect. For this reason I have tried to remove the fat by means of ether, and have abstained from using ointments or oil in the treatment. I wash, or more strictly daub, the patch each morning with ether, rectified spirits of wine, and thymol, in the following proportions: ether, five drachms; rectified spirits of wine, two drachms and a half; and thymol, half a drachm—applying during the day glycerine with a very small trace of perchloride of mercury. Petroleum may be used in place of the ether and spirits. One drachm and a half of petroleum-oil takes up five grains of thymol. The ether or petroleum is of greater value than would at first sight appear, and for the following reason. There is a disease of the scalp, known as seborrhœa sicca, the chief characteristic of which is the falling out of the hair. This is caused by the absence of the natural fat in the sebaceous matter. It is cured by stimulating the glands to action, and by adding fat artificially. In the ringworm patch, we want the diseased hair to fall out; and by producing a condition similar to seborrhœa sicca—that is, by making the part very dry—we can actually produce this effect. Instead, therefore, of epilating by means of forceps—which is useless, as the hair breaks at the neck of the follicle, leaving the diseased part behind—we can epilate by dissolving the fat, and thus loosening the hair in this way, we can in a few days remove all the broken and diseased hairs.—Malcolm Morris, F.R.C.S. Ed., in *British Medical Journal.*

Billroth's Operations.—It is no wonder that Billroth does remarkable operations. In the first place, he is responsible to no one; there is nobody to question him and to ask, why do you do this or why do that? The patient has not a word to say in the matter. If Billroth determines to do an operation, that is the end of it; he is supreme. If the patient recovers, all right; if he dies, all right; not a particle of difference either way. I do not know if he even has any particular satisfaction in the recovery of the patient; it all lies in the fact of having done the operation. In the second place, Billroth has been first professor for years. He has the most abundant material of all classes, qualities and kinds. He does all kinds of surgery, including everything relating to female generative tract. There is no specialty of gynecology of any consequence here. There is not a day in the year, and has not been for years, that Billroth has not done major operations. I do not mean amputations of limbs or resection of joints—he would not look at such a thing. Why! he whips out a goitre as a sort of by-play while the patient is being etherized. To take out a tongue is easy for him, and he ties the lingual arteries on both sides with the utmost ease. So exceedingly familiar is he with the topographical anatomy of the body, that he rarely uses a director, but cuts right down to the place. He stops at nothing. The other day he was removing a cancerous ovary which was found to be adherent to the bladder and part of the small intestine. Does he stop? No! He cuts out a section of the bladder, stitches it up, cuts off seven inches of the intestine, stitches the ends together, removes the growth, closes the wound, and the woman recovers. I saw a man in the ward with a cancer of the stomach at the pyloric end, and after opening the abdomen, he found the disease so extensive, involving so much that he could not remove the growth at all. Does he close up the wound? Not he! He cuts down to the healthy gut, snips it off, cuts

a hole in the healthy part of the stomach, stitches the gut to it, and the man is getting fat. Now I say that, to be sure, they are wonderful operations; but why shouldn't they be? Billroth has attained this boldness and amazing skill in surgery by easy stages and after years of daily operating. Another thing, if he proposes doing an operation a little new or out of the way, he has one cadaver or a dozen to experiment upon, if he wants them, at any time or hour of the day. There are twenty to thirty bodies in the pathological rooms every morning.—*Dr. McClelland in the Philadelphia Med. Times.*

Osseus Tissue Formed from Transplanted Bone-Marrow.—Prof. Bruns, of Tubingen, reports (*Arch. fur Clin. Chir.*, Bd. xxxi., Heft. 3), the results of some experiments he has lately made on animals, with the object of determining whether portions of transplanted bone-marrow can give rise to the formation of deposits of true osseous structure. The Professor states that the animals best suited for experiments of this kind are young dogs. A portion of the shaft of the femur or tibia is resected, and the marrow contained in this resected fragment, removed in an unbroken cylinder. Portions of this cylinder are then inserted into fresh wounds on the breast or back of the same animal, either into the subcutaneous fat or in a superficial part of the muscular layer. The wounds are then carefully closed by means of sutures.

The following changes, it is stated, take place in each instance of successful transplantation: A diffuse swelling is at once formed, which speedily begins to diminish, and is replaced about the fourteenth day by a movable nodule, in which bony tissue already exists in scattered foci. By the twenty-fourth day, foci have usually amalgamated into a single piece of bone. Microscopical examination proves that the nodule, in its early stages, is composed of osteoid tissue, cartilage, and newly-formed osseous tissue, and that the fully developed hard mass consists of true bone.

These experiments, Professor Bruns asserts, prove that bone-marrow, completely separated from its connection with bone, and transplanted under the skin of the same animal, at a remote part of the body, may give rise to the formation of bone and cartilage. The swelling at the seat of transplantation ossifies in part directly and in part by the conversion of cartilage and osteoid tissue into hard bone. The same process takes place in the formation of both the inner and outer callus after fracture; and it may be assumed that bone is formed from the inner surface of the periosteum. It is held by Professor Bruns that in each instance the osteogenetic function is due to the same elements, namely to osteo-blasts, which exist in the inner periosteal layer and are scattered amongst the elements of bone-marrow, particularly in young animals. Professor Waldeyer, of Strasburg, who has examined these specimens, agrees in the view of the part played by the osteo-blasts in the ossification of marrow, and is not disposed to admit any participation in this process of leucocytes of the marrow, wandering leucocytes from the blood, metamorphosed fat cells, or newly-formed, spindle-shaped connective tissue cells.—*Lond. Med. Record.*

Treatment of Abscess of the Liver.—Dr. Randolph Winslow, in *Annals of Anatomy and Surgery*, contributes an excellent article on this subject, and closes his paper with the following conclusions:

The following summary represents the results of my investigations in regard to the surgical treatment of abscess of the liver:

1. The liver should always be aspirated in a case of suspected abscess, in order to verify the diagnosis.

2. Many small, and a few large abscesses, have been cured by one or more aspirations; hence this method should always be employed at the first exploration, and we should then wait until it refills. If the pus collects slowly and in small amounts, it may be again aspirated; if quickly, and in large quantities. aspiration is not to be relied upon.

3. Incisions should be made into the abscess cavity at the most prominent portion of the tumor, whether in an intercostal space or not; and irrespective of the presence or absence of adhesions.

4. Rigid antiseptic precautions add much to the safety and certainty of a successful result.

5. When Listerism is impracticable, good results will be generally obtained by simple incision, or puncture by a trocar and canula, followed by the introduction of a drainage tube, and the daily use of carbolized injections.

6. Any of these methods are preferable to leaving the case to nature.—*American Medical Weekly.*

Connecticut Medical Society and the New York Code.—Resolutions were offered severely condemning the action of the New York Medical Society with regard to consultations, but they were laid upon the table after a brief discussion. The objection to action was that, after some rather severe quarrels, the society has at length been for several years harmonious; that the discussion of these resolutions would lead to hard feelings, and recrimination was inevitable. The wisest course was to manage its own affairs and leave its neighbors alone. A committee of three, however, was appointed to report upon the suggestions of the President concerning a revision of the Code of Ethics.

The St. Louis Medical Society has been considering the question of amending their code, so as to permit consultations with homœopathists.

The meeting of the Michigan Medical Society took no action in regard to the matter.

The Virginia Medical Monthly is in favour of the new Medical Code.

THE MEDICAL STUDENT'S PRIMER.—What place is this? This is the Pathological Society. How does one know it is the Pathological Society? You know it by the specimens and smells. What does that gentleman say? He says he has made a post-mortem. All the gentlemen make post-mortems. They would rather make a post-mortem than go to a party. What is that on the plate? That is a tumor. It is a very large tumor. It weighs one hundred and twelve pounds. The patient weighed eighty-eight pounds. Was the tumor removed from the patient? No, the patient was removed from the tumor. Did they save the patient? No, but they saved the tumor. What is this in the bottle? It is a tape-worm; it is three-quarters of a mile long. Is that much for a tape-worm? It is, indeed, much for a tape-worm, but not much for the Pathological Society.—*Medical Record.*

DIGITAL EXPLORATION OF THE BLADDER.—Sir Henry Thompson's recent proposal to examine, by means of the finger, obscure and chronic disease of the bladder, hitherto inexplicable by sounding, etc., to which we not long ago called attention, is yielding valuable results. A patient who had suffered severely from cystitis and bleeding during three years, and without ascertained cause, was sent to Sir Henry from the country about three months ago, when the bladder was explored by the finger, after dilatation of the urethra, the patient being a lady. The outline of a considerable polypoid growth from the back of the bladder was easily defined, and at once removed by blunt-edged forceps. The patient is making a rapid recovery. There has been no cystitis or bleeding since, in spite of exercise, walking and driving, daily.—*The Lancet.*

DISCHARGE OF GALL STONES THROUGH THE ABDOMINAL WALL.—In *Gaillard's Med. Journal* for April, Dr. H. Humfreyville reports a case of this kind. The patient, three years before, suffered what was then called "inflammation of the bowels," and since then had noticed a soreness just below the umbilicus, where a pyriform tumor existed. This finally opened and discharged a number of gall stones, varying in size from a chestnut to a pea. Beyond some tenderness in the umbilical region, the patient retained excellent health. A similar case was reported by Dr. Augner, of France, the patient also making an excellent recovery.

NERVINE AND ANTI-SPASMODIC.—The following is a favorite prescription in the Hospital for Chest Diseases, London. It is also useful in epilepsy, dysmenorrhœa, chorea, hysteria, and the like :—

℞—Potassii bromidi,		grs. x.
Tinct. conii,		gtt. xxx.
Tinct. val. ammoniæ,		gtt. xx.
Aquæ camph.,		℥j.

BLISTERS IN YOUNG CHILDREN.—M. Archambault (Journal de Méd. et de Chir. prat., Jan. 1882, p. 14) points out that blisters should not be used as routine treatment in children, as they are always painful and often harmful. In a child of a year old, the blister should not be left on longer than one hour; at four or five years, four hours is enough. The blister should be covered with a piece of oiled silk paper. Blisters should never be applied to cachectic children or to those with a tendency to skin eruptions; but above all, blisters should be avoided in diphtheria and croup, and at the terminations of scarlatina, measles, &c., as he has often seen extensive ulcers so caused. Blisters should not be applied posteriorly or to parts exposed to pressure.—*Birmingham Med. Review.*

PRESCRIPTION FOR MEMBRANOUS DYSMENORRHŒA.—Dr. Wm. H. Mussey, of Cincinnati, Ohio, in the *Transactions of the Ohio Medical Society*, 1879. gives the following prescription for membranous dysmenorrhœa, which we have once before published, but which we are requested to republish :

℞—Pulveris guaiaci resinæ,		
Terebenthinæ Canadensis,	*aa*	℥j.
Olei sassafras,	f.	℥ij.
Alcoholis,	f.	℥viij.

Mix. Macerate for seven days and strain.

Then add—

Hydrargyri chloridi corrosivi, ℈j.

Sig. : Take twenty drops in wine or sweetened water, night and morning.—*Virginia Med. Monthly.*

IODOFORM IN GASTRIC ULCER.—Dr. M. J. Redmond (*British Medical Journal*, May 6th, 1882), having observed the rapidity with which external ulcers heal under the influence of iodoform, gave a marked case of gastric ulcer three grains of iodoform three times daily, in pill form. The hæmatemesis which had been persistent up to the use of the iodoform diminished, vomiting ceased, pain and tenderness decreased, and within a month the patient had fully recovered. The patient was a young unmarried woman, so it is possible that there might be an hysterical element in the case. —*Chicago Med. Review.*

CHLORAL HYDRATE ON AN EMPTY STOMACH.—Dr. Clemens (*Alg. Med. Central Zeitung*), holds the administration of chloral upon an empty stomach to be irritational. Nocturnal administrations as an hypnotic, should be preceded by supper; in case of the presence of acid stomach or acid food, a solution of carbonate of soda should be taken. Patients using it should be instructed as to their diet. As a local application, glycerine and chloral. A saturated solution with glycerine is an excellent anodyne in severe toothache from dental caries.—*St. Louis Med. Record.*

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

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PRESCRIBING DRUGGISTS.

Considerable discussion has recently taken place in the secular press on the subject of illegitimate prescribing by druggists, and we are much surprised to observe the course taken by our leading newspaper organs on this question. The controversy arose in consequence of a druggist in the city of Ottawa having been fined for prescribing for a patient contrary to the provisions of the Ontario Medical Act. The druggist in question was not only guilty of the very common offence of prescribing for a patient, but had the audacity to recommend and substitute his own preparation, for the prescription sent him by a legally qualified medical practitioner in that vicinity, to be dispensed. Although the papers have not had the boldness to defend the druggist for such a glaring abuse of his office, yet they preach inane homilies upon the right of every man and woman to prescribe for his fellow-beings in distress, and utter pitiful jeremiades over the great hardships to the public which must accrue if the poor druggist is not allowed to prescribe his simple remedies.

Druggists are like other people, some of them are conscientious and careful enough, and we have no particular fault to find with them even if they do occasionally prescribe some very simple remedy for an importunate individual. There are others, however, who are continually prescribing over the counter for all sorts of ailments—from teething or colic in children to the gravest forms of disease among both children and adults. If it were worth while, or at all necessary, we could recount numbers of cases where persons have nearly lost their lives through this species of tampering with serious diseases; such as, for example, the prescribing of various forms of cough mixtures in inflammation of the lungs; strong cathartic pills in the incipient stage of inflammation of the bowels, trifling remedies in the various stages of syphilis and many other equally serious blunders. And so long as this practice of prescribing over the counter is permitted, such occurrences are to be expected. The druggist, although well enough qualified to dispense medicines, and posted also in regard to their action in health and disease, has no knowledge whatever of diagnosis and pathology—the very foundation-stones of practice of medicine. It is in this that the danger lies, and we cannot but express our regret that the leading newspapers of the day do not consider it a part of their duty to guard the lives of the people, and as far as possible prevent them from being tampered with by ignorant pretenders. We have often had occasion to deplore the fact that the secular press of this country is ever ready to defend quackery in medicine. It does seem to us inexplicable, but it is a fact nevertheless.

All respectable druggists will admit that only properly qualified medical men are competent to prescribe the proper remedies for the sick, and that druggists and other unqualified persons should as far as possible be prohibited from doing so. This is not at all a question of protection to medical men—they can take care of themselves—but it is a subject of great importance to the public who are as a rule unable to judge for themselves in such matters, or to discriminate between the skill of a chemist or an apothecary, and a properly qualified medical man in the treatment of disease. We have no patience with people who are continually crying out about the protection of the profession. Surely the Legislature had the general good of the public in view when the Act was passed. The public have much need of all the protection the law can give, not only from outside the profession—but, with shame be it said, from some of those who have found their way into it—but who have so far forgotten what is due to an honorable profession as to join the army of quacks that are preying upon the credulity and gullibility of the public.

FIRST YEAR'S PROFESSIONAL EXAMINATION.

The question of instituting a compulsory examination in elementary Anatomy and Physiology, at the end of the first year of professional study is now under discussion at the Royal College of Surgeons, England, the General Medical Council, the Royal College of Physicians, and elsewhere. The London *Lancet* for July 15th, in an article on the subject strongly recommends its adoption. The proposal to which a conference of the medical teachers agreed is to the following effect, viz.: that an examination in elementary Anatomy and Physiology, shall be conducted at the end of the first winter session at the various medical schools by the teachers of those schools, said examination to be conducted by means of written papers, and also orally or practically; and that no student shall be allowed to present himself for the primary examination for the membership of the College of Surgeons, until at least six months after passing this preliminary examination.

We are happy to be able to inform our transatlantic brethren, that two years ago the Ontario Medical Council adopted a resolution similar to the one proposed, making an examination at the end of the first year of professional study compulsory upon every student, such examination to be passed in the various medical schools, and the plan has been found to work well. Each candidate is required, before presenting himself for the primary examination of the college, to present with his lecture tickets a certificate of having undergone an examination at the school he has attended at the close of his first winter session, on elementary Anatomy, Physiology, Chemistry and Botany. At the time of its adoption by the Council it was urged by the representative of Trinity Medical College, and heartily supported by many members, that while this first year's examination would cost the Council nothing, it would be of great value to the students by keeping them at work from the beginning, just the period when many of them are disposed to waste precious time, and that it would prevent the tendency which prior to this was a growing one, to the straggling away of many members of the several classes before the courses of lectures were anything like concluded. The expectations of its promoters have been fully realized. The examination has done much good and will yet do more, as the several schools take it up more thoroughly which they are sure to do. It is therefore gratifying to see that our brethren have adopted a resolution similar in spirit to the one above alluded to, so that hereafter all candidates will be obliged to present a certificate of having passed an examination on elementary Anatomy and Physiology at the close of the first session said examination to be conducted both by means of written papers and orally or practically, just the plan adopted and found to work so well in Canadian schools during the past two years. This resolution has the support of the principal teachers of the various schools in London.

THE TORONTO SCHOOL "ORGAN."

Our homœopathophobic contemporary has surely taken leave of its senses during the warm weather. In the May issue it published the statement that our adverse criticism of Dr. Oldright's appointment as chairman of the Ontario Board of Health arose from disappointed ambition, and having been taken to task for such an unwarrantable statement, the "organ" now says editorially, that "the principal motive which inspired the articles in the LANCET was personal enmity," inasmuch as Dr. Oldright had beaten us in the contest for the Senate of the Toronto University several years ago. This statement is not only exceedingly silly, but is absolutely untrue, and shows how anxious the "organ" is to weaken the force of our criticism by trying to make it appear as a "purely personal attack" on the chairman. There were three vacancies in the Senate, and four candidates in the field, not one of whom was individually pitted against any one of the others. Besides, we can easily prove that we asked many of our friends to vote for Dr. Oldright, as one of the candidates. It is also really touching to see the fatherly interest our contemporary has recently taken in our behalf, and in behalf of the LANCET. We cannot but feel grateful for the kindly advice so gratuitously tendered, and are inclined to wonder how we managed to reach the position we have attained in the support and estimation of the profession before it came to the rescue. But while thanking it for its very kind interference, we may be permitted to say that we intend to manage our own

business in our own way, and to continue the same course which has heretofore borne such good fruits, that we are enabled to say that we have "the largest circulation" of any medical journal in Canada. This statement, from the manner in which it has been alluded to on several occasions, seems to seriously wound the tender susceptibilities of our hyperæsthetic contemporary. We sincerely regret that it should so far misapprehend our object in making this statement. We have no desire to flaunt our "large circulation" in the face of our contemporary, but make the statement simply as a matter of business, with a view to increase our advertising patronage, which is a profitable part of the management of a journal of good circulation.

We apologize to our readers for occupying space with a matter which is almost purely personal. We do not feel ourselves bound to correct all the false statements made concerning us by our contemporary, nor to defend our mode of doing business, and would say that this discussion will end here, so far as we are concerned, as we do not consider such controversy either dignifying to those concerned or edifying to our readers.

VITAL STATISTICS

An announcement appears in the last issue of the *Canada Gazette*, to the effect that each of the electoral districts of the Provinces of Ontario, Quebec, New Brunswick, and Nova Scotia have been constituted health districts for the purpose of statistics under the Act respecting Census and Statistics.

We understand that the sum of $10,000 was placed in the estimates and voted by Parliament last session for the collection of Health Statistics, and we presume this division of the Provinces is in pursuance of some scheme to meet the repeated request of the Canada Medical Association, representing the profession of the Dominion, that some comprehensive plan should be adopted to collect and utilize the vital statistics of the Dominion. Of course the sum allowed is quite inadequate for any efficient and beneficial organization. It is to be feared that the limited means for the purpose, may lead the Government to undertake the work on what is sometimes called a cheese-paring plan. Should failure result in such a case, it will be due entirely to this fact. The value of vital statistics to a nation, can no longer be questioned when properly dealt with, and the fact is recognized by all civilized nations. As we are as yet uninformed as to the nature of the contemplated machinery for the Dominion, we can offer no opinion as to the chances of success. Above every other consideration, it is most important that the chief officer of the Bureau of Health should possess the best qualifications the medical profession of the country can supply. To secure a suitable person, the salary should be at least equal to the income a first-class practitioner can command. We trust the Government will succeed in securing the services of a properly qualified person, who will command the respect of the profession and the public. We have in our mind one, who we believe would ably fill the position; at least among the profession, no one would meet with more general and hearty approval. We refer to Dr. Canniff of Toronto. He has already, for a brief period, served the Department of Agriculture; and indeed, it was understood from statements made by Sir J. A. Macdonald to a deputation of medical men which waited upon him in the winter of 1880-81, that the services of the person referred to would be retained to carry into effect the Act relating to Vital Statistics as soon as the Census had been taken. We may be permitted to say that we think the Government should, without further delay, meet the wishes of the profession and the requirements of the country in this respect in a liberal spirit.

CANADA MEDICAL ASSOCIATION.—The annual meeting this year will take place in Toronto, commencing Wednesday, the 6th of September. We anticipate a large attendance, as, in addition to the interest in connection with the Association itself, there will be the Industrial Exhibition, which opens the same week. Last year only a few Ontario medical men found it convenient to attend the meeting at Halifax; but those who did experienced no regret, as the meeting was very successful, except in point of numbers. We have not learned as to the number and character of the papers to be read at the approaching meeting. We shall be glad to welcome the President-elect, Dr. Fenwick of Montreal, who will no doubt ably discharge the duties of his office. And we are glad to know that

the work belonging to the Secretaryship is in such good hands as those of Dr. Osler of Montreal.

We are able to state that the profession of Toronto will extend a cordial welcome to the members of the Association, and endeavor to make the occasion a pleasant one from a social point of view. Arrangements have already been made to hold a reception in the rooms of the Educational Department, which have been kindly placed at the service of the Committee of Arrangements by the Minister of Education, and other festivities will mark the occasion. The City Council has kindly granted the use of their Council Chamber for the meetings of the Association.

College of Physicians and Surgeons of Manitoba.—At a meeting of the profession held June 13th, the following gentlemen were elected members of the Council:—Dr. J. H. O'Donnell, Dr. J. S Lynch. Dr. A. Codd, Dr. D. Young and Dr. A. H. Ferguson.

The new Council met on the 20th of June and the following officers were elected:—Dr. Lynch, President; Dr. Young, Vice-President; Dr. Codd, Treasurer; Dr. A. H. Ferguson, Registrar.

Any graduate in Medicine in Her Majesty's Dominions is recognized by the Council and may be admitted to practice on payment of a registration fee of $10. American graduates and undergraduates are admitted by passing a satisfactory examination before a board of examiners appointed by the Council.

Chronic Bronchitis (Correction).—In our last issue, on page 351, will be found a prescription for chronic bronchitis, in which the proportion of Amm. Carb. is put down ℥j. It should be ʒj. Dr. J. Carrick Murray, senior medical officer of the Northern Counties Hospital for Diseases of the Chest, Newcastle-on-Tyne, Eng., who very kindly called our attention to the error, recommends the following as an improvement upon our prescription.

℞—Am. Carb.,		ʒj.
Spts. Amm. Arom.,		
Spts. Æth. Nit.,	*aa*	℥ss.
Syr. Scillæ,		℥j.
Tr. Camph. Co.,		ʒjss.
Vin. Ipecac.,		ʒij.
Infus. Senegæ,	*ad*	℥viij.—M.

Sig.—A tablespoonful every four hours.

Personal.—Dr. Osler, of Montreal, has been elected an honorary member of the New York Pathological Society.—Dr. Henry Howard, of Longue Pointe lunatic asylum, is about to publish a work on insanity.—Dr. A. Jukes, of St. Catharines, has removed to Qu'Appelle, N.W.T. Dr. O. C. Edwards, of Montreal, has also located there.—Dr. R. A. Reeve will be out of the city during the month of August, on a holiday trip to the North-West.—Dr. A. M. Rosebrugh, of Toronto, is spending his summer holidays in Minnesota and the Canadian North-West Territory.

Personation at Medical Examinations.—We learn from the London *Lancet* that a case has just been heard in Dublin, before Mr. Curran, Q.C., in which a student of that city was summoned on a charge of attempting to induce a gentleman, Dr. Norris, to personate him at a Dublin examination, and offering him in the first instance £150 and afterwards £100. The Court issued a warrant for his arrest. One or two cases of this kind actually occurred in this city, but the fraud was discovered in time to prevent its consummation.

New Treatment of Pruritus.—Dr. Steele, of Denver, Col., communicates to the profession, through the *Lancet and Clinic*, what he considers a very reliable acquisition in the treatment of that troublesome affection, pruritus vulvæ. It may be applied to pruritus ani as well. The remedy is quinia sulphate, rubbed up with only sufficient lard to hold it together. The nearer you get the full strength of the quinia the more efficacious it will prove. Apply freely and thoroughly. It has proven a specific in his hands.

Fellow of the Royal College of Physicians.—We are pleased to state that Dr. J. A. Grant of Ottawa has been recently elected a Fellow of the Royal College of Physicians, London. He received the membership degree in 1864. We congratulate the Dr. upon his election, a distinction to which he is fully entitled. We believe this is the first time this distinguished honor has been given to a Canadian.

The death of Prof. Spence of Edinburgh, at the age of 70 years, also that of Dr. Peacock, St. Thomas' Hospital of London, England, at the same age is announced in our British Exchanges.

APPOINTMENTS.—Drs. Geo. Wright and A. H. Wright, have been appointed members of the attending staff of the Toronto General Hospital, and Dr. J. E. Graham has been appointed on the pathological staff. Dr. J. A. McDonald has been appointed Resident House Surgeon, Montreal General Hospital; and Drs. T. N. McLean and W. T. Duncan, have been appointed Resident Medical Officers.

ANÆSTHETIC MIXTURES.—The Vienna mixture, used in 8,000 operations without accident, consists of three parts of ether and one of chloroform; Billroth's, three of ether, one each of chloroform and alcohol. The committee of the Medico-Chirurgical Society, of Great Britain, recommends one part, by measure of alcohol, two of chloroform, and three of ether.

ROYAL COLLEGE OF SURGEONS, ENG.—Mr. John Marshall, Mr. H. Power, and Mr. Croft, have been elected members of the Council of the Royal College of Surgeons, Eng. The two former were re-elected. At a subsequent meeting Mr. Spencer Wells was elected President, and Mr. John Marshall and Mr. Cooper Foster, Vice-Presidents, for the ensuing year.

NOTICE.—The New Medical Register of the College of Physicians and Surgeons of Ontario is about to be published. Members of the College are requested to see that their addresses are correctly given; any additional qualification may be added on payment of a fee of two dollars (see advt.)

LIGATURE OF THE ARTERIA INNOMINATA.—Mr. Thompson, of London, Eng., has recently applied the ligature to the innominate artery for the cure of aneurism. The case is doing well at last accounts, having reached the 34th day after the operation.

LONDON MEDICAL SCHOOL.—We have received the first annual announcement of the Medical Department of the Western University, London, Ont. The first course of lectures will commence October 3rd, 1882.

R. J. B. Howard, M.D., and R. Levi, of McGill College, Montreal, have successfully passed the primary examination of the Royal College of Surgeons, Eng.

Books and Pamphlets.

THE POPULAR SCIENCE MONTHLY for August. New York: D. Appleton & Co.

This ably conducted periodical continues to sustain its conceded high reputation, as a vehicle of instructive and profitably entertaining matter, in the wide range of modern science. The August number, now before us, exhibits no falling off in either the variety or the substantial value of its content. It presents no less than fourteen articles on subjects of inviting interest to all intelligent and enquiring readers, and in addition to these, under the titles of "Entertaining Varieties," "Editor's Table," "Literary Notices," "Popular Miscellany," and "Notes," we have, in smaller type, and closer lines, a truly useful miscellany.

The article by the distinguished Benjamin Ward Richardson, M.D., F.R.S., under the designation of "National Necessities and National Education," is of such sound practical merits as to claim the deferential consideration of the entire body of educationalists, of all parents or guardians of the young, advisers or formulators of school regulations, and framers of school statutes.

Dr. Richardson has, on all available occasions, declared his hostility to the modern and far too prevalent system of school cramming. It would appear that in England, as in Ontario, a premium is offered to those who exhibit the highest success in this senseless and deplorably profitless art. An able and experienced lady, long engaged in teaching, speaking of the hurtful physical results of existing school requirements, says she had "found that to obtain the school grants, the children are so constrained as to exclude the exercises that are needed for their bodily development." Surely a more potent temptation than this mode of earning the *school grants*,—in other words the wages of the teacher,—could hardly be devised by the most determined, or the most stupid, devastator of both bodily and mental health.

Dr. Richardson speaks of the present system in the following decided terms:—"The present system is not only a violation of physiological, but also of psychological law. The powers of receptivity of the minds of children of different ages have been tested experimentally, with as much care as physicists take when they are treating in

their experiments on the relationships of ordinary matter to force. Certain brains can take in so much, and no more, according to age. The capacity grows with cultivation and skilful teaching, no doubt, but it *must be permitted to grow.* In the very young a lesson of a minute may be all-sufficient. Later, of three minutes, five, ten, fifteen, and so on, to one hour, two, or three. But to this there is a limit, and it is probable that, with the best scholar of primary school age, the powers of receptivity rarely extend beyond a period of two hours and a-half of direct teaching. Teachers of various districts, and of different countries, have testified in respect to this point, and while they have explained, from direct observation, that the receptivity varies in different children, according to difference of temperament, physical health and build, as might very well be expected, the receptivity at one time, in all children, ceases at the end of three hours."

HOMŒOPATHY: WHAT IS IT? By Prof. A. B. Palmer, M.D., Ann Arbor, Mich. Second Edition. Detroit: G. S. Davis. Toronto: Willing & Williamson.

We beg leave to acknowledge the receipt of the above work from the publishers. Recent treatment of the subject by prominent societies and individuals—for example, the action of Sir Wm. Jenner and Dr. Quain in the case of the late Earl of Beaconsfield, with the action of the British Medical Association in the premises; the reference to the subject in the new code adopted by the New York State Medical Society; the article by Dr. Palmer in the March number of the *North American Review*, etc.—attach additional interest to "Homœopathy—What Is It?" at this particular time.

MEMORANDA OF PHYSIOLOGY. By Henry Ashby, M.D. (London), Physician to the General Hospital for Sick Children, Manchester, etc., etc. Third edition, thoroughly revised, with additions and corrections, by an American Editor. New York: Wm. Wood & Co., 1881. Toronto: Willing and Williamson.

This is one of Wood & Co.'s Memoranda Series, and is really a very good short compend on the subject. All these works have their proper place in a medical library, and this one will be found very useful, especially where a student wishes to run over the points of physiology in a short time.

A TEXT-BOOK OF PHYSIOLOGY. By M. Foster, M.A., M.D., F.R.S, Trinity College, Cambridge. Second American, from the third revised English edition. Edited by Ed. J. Reichert, M.D., Philadelphia: H. C. Lea's Son & Co. Toronto: Hart & Co.

This excellent work is already favorably known to the student of physiology. The most important changes in the present edition by the author, are to be found in the section on muscle and nerve. The remaining changes are not of great importance. The American editor has made some few changes and additions which will enhance the value of the work to American students. A number of new cuts have been introduced instead of the old ones, and others added. The present work will be found to embody all the recent advances made in experimental physiology.

MANUAL OF OBSTETRICS, by A. F. A. King, M.D., Prof. of Obstetrics in the Columbian University, Washington, D. C., with 58 illustrations. Philadelphia: H. C. Lea's Son & Co. Toronto: Willing & Williamson.

This work is much of the same character as Meadow's Manual, so well known to medical students. It is probably a little more complete in detail than the latter, and is of course more recent. It is, as the author states in his preface, a compilation from Leishman, Playfair and Lusk. We regret, however, that he did not adhere to the old terms "ante-partum" and "post-partum," instead of the horrid Anglicized words, Antepartal, and Postpartal, which fall so harshly on the ears.

Births, Marriages and Deaths.

At the Asylum, London, on July 7th, the wife of Dr. Millman, of a daughter.

On the 19th ult., Dr. Alexander Robinson of Hamilton, to Alice Maud, second daughter of the late Jacob Pingle, Esq., of Markham.

On the 9th of June, Dr. Henry Edward Bissett, of Port Hawkesbury, N.S., in the 40th year of his age.

On the 9th of June, Dr. Samuel Blackwood, of Pakenham, Ont., aged 70 years.

On the 28th of July, Dr. John Salmon, of Simcoe, aged 52 years.

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